

























Charles Branch Wilson Esq

WITH KIND REGARDS

J. R. R. STEBBING  
JUNBRIDGE

# ANNALS

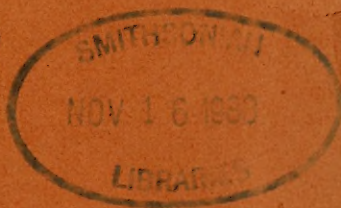
OF THE

## SOUTH AFRICAN MUSEUM.

VOLUME VI.

PART IV. containing:—

- 6.—*General Catalogue of South African Crustacea* (Part V. of S. A. Crustacea, for the Marine Investigations in South Africa).—  
By the Rev. THOMAS R. R. STEBBING, M.A., F.R.S., F.L.S.,  
F.Z.S., Fellow of King's College, London, Hon. Memb. New  
Zealand Inst., Hon. Fellow Worcester College, Oxford.



ISSUED DEC. 15th, 1910. PRICE £1 7s.

PRINTED FOR THE  
TRUSTEES OF THE SOUTH AFRICAN MUSEUM  
By WEST, NEWMAN & Co., LONDON.





Qh  
441.6  
S6S74  
1900  
pt.5  
NVZ

Stebbing, Thomas R.R.  
South African Crustacea.  
pt.5 (1910)

( 281 )

- 6.—*General Catalogue of South African Crustacea* (Part V. of S.A. Crustacea, for the Marine Investigations in South Africa)\*.—By the Rev. THOMAS R. R. STEBBING, M.A., F.R.S., F.L.S., F.Z.S., Fellow of King's College, London, Hon. Memb. New Zealand Inst., Hon. Fellow Worcester College, Oxford.

THE first part of this treatise on the crustacean fauna of South Africa was published ten years ago. A systematic review of the subject was then and has since been deferred, in order that important additions to our knowledge of it, resulting from recent researches, might be more or less adequately dealt with. In the meantime the extensive collections made by Dr. Gilchrist, during the *Pieter Faure* expeditions, together with material provided by Dr. Péringuey and several other naturalists, have so greatly enlarged the task of description, that any methodical survey has run a chance of being indefinitely postponed. Over and over again, in drawing up this present Catalogue, I have felt that it may be misleading, should any one hastily infer from it that such and such tribes or families are scantily represented, or that this or that genus has no species, in South African waters. Almost at every point I have been tempted to linger over the illustration and definition of new species, or the discussion of forms not hitherto recorded from the district. As will be seen, the temptation has sometimes been too strong to be overcome. Thus a crab so long known as *Hexapus sexpes* (Fabricius) has been drawn and quartered afresh; a new crab has been described and figured as *Nasinatalis disjunctipes* in the tribe Oxystomata; further, the plates claim to exhibit a new Pagurid, a new Isopod, two new Caprellids, and two new species of Sympoda, one of them suggesting the institution of a new genus and a new family. Obviously, however, most of the Catalogue deals with names already

\* Parts I.—III. have been published in the "Marine Investigations in South Africa," Part IV. in Vol. VI. of the Annals of the South African Museum.



published. Among these here and there I have ventured fearfully to introduce some changes, as in proposing *Pachos* among the Copepoda in place of the preoccupied *Pachysoma*, Claus, and in vindicating Ostrapoda, Straus, against Ostracoda, Latreille.

The substitution of *Ægeon* for Risso's preoccupied *Egeon* appears to originate, not as I formerly supposed with Guérin, but with Kinahan in 1857, who at that date rejected the genus, but revived it in 1862, and to him the name is therefore rightly attributed by J. V. Carus in 1885.

*Nocticula*, J. V. Thompson, 1829, claims rather fuller notice than I have given it on p. 396. Sars quotes it as *Noctiluca*. But Thompson may have had his own reasons for adopting an anagrammatic form founded on that name rather than the name itself. Actually in his *Researches*, vol. i., pt. 1, Mem. 3, p. 52, he prints *Nocticula*. He explains that he establishes this genus for an animal discovered and named by Sir Joseph Banks as "*Cancer fulgens* (Macartney Phil. Trans., 1810)," pl. 14, fig. 1 and 2. On p. 53 he takes the liberty of renaming this animal "*Nocticula Banksii* or Luminous Shrimp." Thompson's scholarship was evidently not on a par with his scientific ability, since he calls the group to which his new genus belongs Shizopodæ. But *Nocticula* would be valid, if its species could be identified.

The Catalogue may expect to be reproached for its great length. As its foster-parent I venture to urge in its defence that ships bound for almost anywhere take South Africa on their way and fish in its teeming waters without remorse. That is not the only thing. It is well known that by a legal fiction an ambassador carries a circumambient fragment of his own country with him into the land to which he is accredited. But as an actual fact the earth of African lakes, transferred to the aquaria of Professor Sars in Norway has yielded in that distant clime a plentiful crop of true South African Crustacea. The length, then, of the Catalogue is not due to any malice of its own, but to the wonderful activity of carcinologists in recent years. Apologies indeed are due for the omission of innumerable important references, balanced by apologies to students of the modern school who will perhaps regard most of those that are given as entirely superfluous.

## MALACOSTRACA.

### BRACHYURA.

#### BRACHYURA GENUINA.

##### TRIBE OXYRRHYNCHA.

1852. *Oxyrhyncha*, Dana, United States Exploring Expedition, vol. xiii., p. 75.  
1886. *O.*, Miers, Challenger Brachyura, Reports, vol. xvii., Rep. 49, p. 2.  
1893. *Oxyrrhyncha*, Stebbing, A History of Crustacea, Internat. Sci. Ser., vol. lxxiv., p. 104  
1895. *Oxyrhyncha*, Alcock, Journal Asiatic Society of Bengal, vol. lxiv., pt. 2, No. 2, p. 159.

Alcock divides the tribe into families, Maiidæ and Parthenopidæ, the former containing four sub-families, Inachinæ, Acanthonychinæ, Pisinæ, and Maiinæ, the latter containing two sub-families, Parthenopinæ and Eumedoninæ. These subdivisions are here treated as families, with the consequent alteration in the ending of the names, with the further change of Pisinæ into the Blastidæ and Maiinæ into Mamaiidæ for reasons which have been already explained elsewhere.

##### FAMILY INACHIDÆ.

1895. *Inachinæ*, Alcock, Journal Asiatic Society of Bengal, vol. lxiv., pt. 2, pp. 160, 162, 168.



## GEN. INACHUS, J. C. Fabricius.

1798. *Inachus*, Fabricius, Supplementum Entomologiæ Systematicæ, p. 355.

## INACHUS ANTARCTICUS, Doflein.

1904. *Inachus antarcticus*, Doflein, Valdivia Brachyura (wissenschaftliche Ergebnisse der deutschen Tiefsee-Expedition auf dem Dampfer *Valdivia*, 1898-1899, vol. vi.), p. 74, pl. 28, figs. 2, 3. At the Agulhas Bank, from 155 m. depth.

## GEN. MACROPODIA, Leach.

1813. *Macropodia*, Leach, Edinburgh Encyclopædia, vol. vii., p. 395.  
 1897. *M.*, Rathbun, Proceedings of the Biological Society of Washington, vol. xi., p. 155.

## MACROPODIA FALCIFERA (Stimpson).

1857. *Stenorhynchus falcifer*, Stimpson, Proceedings of the Academy of Natural Sciences, Philadelphia, vol. ix., p. 219.

At Cape of Good Hope, in Simon's Bay, among algæ on sandy bottom, at 22 m. depth.

1886. *Stenorhynchus f.*, Miers, Report on the Brachyura collected by H.M.S. *Challenger* during the years 1873-1876, vol. xvii., No. 49, p. 6, pl. 1, fig. 1.

Dredged in Simon's Bay, 9-33 m. depth.

1904. *S. f.*, Doflein, Valdivia Brachyura, p. 70, fig. in text.

Francis Bay, and at 102 m. in southern part of Agulhas Bank, and between shallow water and 100 m. at Plettenberg Bay.

1907. *Macropodia falcifera*, Rathbun, footnote to *Stenorhynchus falcifer*, Stimpson. Report on the Crustacea (Brachyura and Anomura) collected by the North Pacific Exploring Expedition, 1853-1856, in Smithsonian Miscellaneous Collections, vol. xlix., p. 22, pl. 3 (facing p. 16), fig. 8.

## GEN. HALIMUS, Latreille.

1829. *Halimus*, Latreille, Le Règne Animal, éd. 2, vol. iv., p. 60.  
 1897. *H.*, Rathbun, Proc. Biol. Soc. Washington, vol. xi., p. 157.

1908. *H.*, Stebbing, South African Crustacea, pt. 4, in Gilchrist's Marine Investigations; Annals of the South African Museum, vol. vi., p. 5.

HALIMUS DIACANTHUS (de Haan).

1839. *Pisa* (*Naxia*) *diacantha*, de Haan, Crustacea of Siebold's Fauna Japonica, decas quarta, p. 96, pl. 24, fig. 1, and pl. G.  
1908. *Halimus diacanthus*, Stebbing, S.A. Crust., pt. 4, p. 5. Durban.

GEN. ACHÆOPSIS, Stimpson.

1857. *Achæopsis*, Stimpson, Pr. Ac. Sci. Philad., vol. ix., p. 219.  
1879. *A.*, Miers, Journal of the Linnean Society, vol. xiv., Zool., No. 79, p. 645.  
1907. *A.*, Stimpson, Smithson. Misc. Coll., vol. xlix., p. 21.

ACHÆOPSIS SPINULOSUS, Stimpson.

1857. *Achæopsis spinulosus*, Stimpson, Pr. Ac. Sci. Philad., vol. ix., p. 219.  
At Cape of Good Hope, in Simon's Bay, from 18 m. depth.  
1886. *A. s.*, Miers, Challenger Brachyura, p. 18, pl. 1, fig. 4. Simon's Bay, 9-36 m. depth.  
1907. *A. s.*, Stimpson, Smithson. Misc. Coll., vol. xlix. p. 21, pl. 3 facing p. 16, figs. 5, 5a.

ACHÆOPSIS GÜNTHERI, Miers.

1879. *Achæopsis güntheri*, Miers, Annals and Magazine of Natural History, ser. 5, vol. iv., p. 2, pl. 4, fig. 1.  
Cape of Good Hope, in shallow water.

GEN. DORYNCHUS Norman.

1873. *Dorynchus*, Norman, Wyville-Thomson, Depths of the Sea, p. 174, fig. 34.  
1880 (? 1881). *Lispognathus*, A. Milne-Edwards, Études sur les Crustacés de la région Mexicaine, p. 349.  
1897. *D.* or *L.*, Rathbun, Pr. Biol. Soc. Washington, vol. xi., p. 162.  
1904. *L.*, Doflein, Valdivia Brachyura, p. 75.



## \* DORYNCHUS THOMSONI, Norman.

1873. *Dorynchus thomsoni*, Norman, Depths of the Sea, p. 174, fig. 34.  
 1880. *Lispognathus furcillatus*, A. Milne-Edwards, Crust. Mexic., p. 349, pl. 31A, fig. 4.  
 1881. *L. thomsoni*, A. Milne-Edwards, Comptes rendus Ac. Sci. Paris, pp. 878, 932.  
 1886. *L. t.*, Miers, Challenger Brachyura, p. 28, pl. 5, fig. 2.  
     Agulhas Bank, off Cape Agulhas, from 274 m. depth.  
 1904. *L. t.*, Doflein, Valdivia Brachyura, p. 75.  
     Off Cape Town, at 106 m.; in Francis Bay; in the Agulhas current, from 155 m.; at Cape of Good Hope, in 318 m. depth.

*Dorynchus t.* has been sent me by Dr. Péringuey, Nov., 1908, from Saldanha Bay. No. 14746A.

## GEN. PLATYMAIA, Miers.

1886. *Platymaia*, Miers, Challenger Brachyura, p. 12.  
 1902. *P.*, Stebbing, S.A. Crustacea, pt. 2, p. 2.  
 1904. *P.*, Doflein, Valdivia Brachyura, p. 59.

## \* PLATYMAIA WYVILLE-THOMSONI, Miers.

1886. *Platymaia wyville-thomsoni*, Miers, Challenger Brachyura, p. 13, pl. 2, fig. 1.  
 1902. *P. turbynei*, Stebbing, S.A. Crust., pt. 2, p. 3, pl. 5.  
     Obtained by Dr. Gilchrist, No. 147. Cape Natal N. by E. (approx.) 24 miles, from 804 m. depth.  
 1904. *P. wyville-thomsoni*, Doflein, Valdivia Brachyura, p. 59, pls. 2, 20-23, 39, 43, figs. 5, 6; pl. 50, figs. 2, 5, 6; text-figs. 2-5.  
 1908. *P. w.*, Stebbing, S.A. Crust., pt. 4, p. 4.

## FAMILY ACANTHONYCHIDÆ.

1895. *Acanthonychinæ*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxiv., pt. 2, pp. 160, 164, 190.

\* An asterisk prefixed to the name of a species implies that it has been supplied by the South African Museum.

GEN. ANTILIBINIA, M<sup>c</sup>Leay.

1838. *Antilibinia*, M<sup>c</sup>Leay, Illustrations of the Annulosa of South Africa, p. 561.  
 1839. *A.*, de Haan, Crust. Japonica, decas quarta, p. 85.  
 1843. *A.*, Krauss, Die südafrikanischen Crustaceen, p. 49.

ANTILIBINIA SMITHII, M<sup>c</sup>Leay.

1838. *Antilibinia smithii*, M<sup>c</sup>Leay, Annulosa of S. Africa, p. 57, pl. 2.  
 1843. *A. s.*, Krauss, Südafrik. Crust., pp. 15, 49, pl. 3, fig. 4.  
 Krauss says: "This species is never overgrown with marine organisms and is found only on the surf-lashed rocks of the Natal coast."  
 1893. *A. s.*, Stebbing, A History of Crustacea, Recent Malacostraca, Internat. Sci. Ser., vol. lxxiv, p. 117.

GEN. DEHAANIUS, M<sup>c</sup>Leay.

1838. *Dehaanius*, M<sup>c</sup>Leay, Annulosa of S. Africa, p. 57.  
 1839. *D.*, de Haan, Crust. Japonica, decas quarta, p. 83.  
 1900. *D.*, Stebbing, S.A. Crustacea, pt. 1, p. 18.

\* DEHAANIUS DENTATUS, (Milne-Edwards).

1834. *Acanthonyx dentatus*, M.-Edw., Histoire Naturelle des Crustacés, vol. i., p. 343.  
 From the Cape of Good Hope.  
 1838. *Dehaanius acanthopus*, M<sup>c</sup>Leay, Annulosa of S. Africa, p. 58, pl. 3, figs. *a*, *b*, *c*.  
 1843. *Acanthonyx dentatus*, Krauss, Südafrik. Crust., p. 48.  
 Always found covered with young marine plants on the rocky coast of Natal.  
 1857. *A. d.*, Stimpson, Pr. Ac. Sci. Philad., vol. ix., p. 220 (26).  
 At Cape of Good Hope, in Simon's Bay, 22 m. depth.  
 1886. *Dehaanius d.*, Miers, Challenger Brachyura, p. 39.  
 Simon's Bay, 18-36 m.  
 1900. *D. d.*, Stebbing, S.A. Crustacea, pt. 1, p. 19.  
 No. 17, dredged by Dr. Gilchrist in False Bay; No. 44, in Algoa Bay between Bird Island and the mainland, 18-29 m.  
 1907. *D. d.*, Rathbun, footnote to *Acanthonyx d.*, Stimpson, Smithson. Misc. Coll., vol. xlix., p. 26.  
 Stimpson says: "Living specimens are of an olive colour."



## DEHAANIUS MACLEAII (Krauss).

1843. *Acanthonyx macleaii*, Krauss, Südafrik. Crust., p. 47, pl. 3, fig. 6.

On seaweed-covered rocks of the Natal coast.

1886. *A. mac-leayii*, Miers, Challenger Brachyura, p. 43.

1900. *Dehaanius m.*, Stebbing, S.A. Crustacea, pt. 1, p. 20.

## DEHAANIUS 4-DENTATUS (Krauss).

1843. *Acanthonyx 4-dentatus* Krauss, Südafrik. Crust., p. 49, pl. 3, fig. 7.

In the marine growths on the rocky coast of Natal.

1875. *A. consobrinus*, Paulson, Red Sea Crustacea, p. 7, pl. 3, fig. 1.

Paulson recognises the priority of Krauss's specific name, yet adopts the later one given by Alphonse Milne-Edwards.

1886. *A. quadridentatus*, Miers, Challenger Brachyura, p. 43.

1900. *Dehaanius q.*, Stebbing, S.A. Crustacea, pt. 1, p. 20.

## GEN. EPIALTUS, Milne-Edwards.

1834. *Epialtus*, Milne-Edwards, Hist. Nat. Crust., vol. i., p. 344.

EPIALTUS SCUTELLATUS (M<sup>c</sup>Leay).

1838. *Acanthonyx scutellatus*, M<sup>c</sup>Leay, Annulosa of S. Africa, p. 57.

1886. *Epialtus s.*, Miers, Challenger Brachyura, p. 43 footnote.

Miers only says that this is *perhaps* a species of *Epialtus*.

## FAMILY BLASTIDÆ.

1895. *Pisinæ*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxiv., pt. 2, pp. 160, 165, 200.

1905. *Blastidæ*, Stebbing, S.A. Crustacea, pt. 3, pp. 22, 25.

## INCERTÆ SEDIS.

## PISA FASCICULARIS, Krauss.

1843. *Pisa fascicularis*, Krauss, Südafrik. Crust., p. 50, pl. 3, fig. 5.

"It is quite covered with *Jania rubens*, Lamarek, on the rocky coast of Natal."

1880. *P. f.*, Richters, Decapoda of Mauritius and the Seychelles, p. 141, in Möbius's Mauritius.

1886. *P. f.*, Miers, Challenger Brachyura, p. 56.

Miers, discussing a section of the genus *Hyastenus*, White, with *H. sebæ*, White, for its type, says: "*Pisa fascicularis*, Krauss, from Natal, may be referable here, but the orbits are shown in the figure as entire above." *Pisa* is a synonym of *Blastus*, Leach, and *Hyastenus* of *Halimus*, Latreille.

#### GEN. EURYNOME, Leach.

1814. *Eurynome*, Leach, Edinb. Encycl., vol. vii., p. 431.

1815. *E.*, Leach, Trans. Linn. Soc., vol. xi., p. 325.

#### \* EURYNOME LONGIMANA, Stimpson.

1857. *Eurynome longimana*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 220 (26).

1907. *E. l.*, Stimpson, Smithson. Misc. Coll., vol. xlix., p. 27, pl. 4 (facing p. 28), fig. 2.

Dredged in 18 m., "on a rocky bottom, among *Gorgonia*, &c., in False Bay, Cape of Good Hope." No. 7, sent by Dr. Gilchrist, from False Bay.

#### GEN. SCYRAMATHIA, A. Milne-Edwards.

1880. *Scyramathia*, A. M.-Edw., Bulletin of the Museum of Comparative Zoölogy, Harvard, vol. viii., p. 311.

1902. *S.*, Stebbing, S.A. Crustacea, pt. 2, p. 5.

1904. *S.*, Doflein, Valdivia Brachyura, p. 80.

The *Rachinia* of A. Milne-Edwards, Crust. Mexicains, pl. 18, fig. 1, *Rochinia* on p. 86 footnote, which Miers, Challenger Brachyura, p. 64, approximates to *Notolopas*, Stimpson, seems equally near to young forms of *Scyramathia*. See Alcock, Journ. Asiat. Soc. Bengal, vol. lxiv., p. 165.

#### \* SCYRAMATHIA HERTWIGI, Doflein.

1900. *Scyramathia hertwigi*, Doflein, in Chun's Aus den Tiefen des Weltmeeres, fig. on p. 497.

1902. *S. h.*, Stebbing, S.A. Crustacea, pt. 2, p. 7, pl. 6.

No. 25, taken by Dr. Gilchrist, 28 miles off Lion's Head, from 256 m. depth.



1904. *S. h.*, Doflein, Valdivia Brachyura, p. 81, pls. 27, figs. 1-7 ;  
28, fig. 1.  
Agulhas Current, from 500 m. depth ; Cape of Good Hope,  
318 m. depth.
1905. *S. h.*, Stebbing, S.A. Crustacea, pt. 3, p. 25.  
No. 65, at the same locality as No. 25 ; Nos. 222-226, 253,  
obtained by Dr. Gilchrist at Cape Point, N. 50° E., 18½ miles ;  
depth 329 m.

## FAMILY MAMAIIDÆ.

1895. *Mainæ*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxiv., pt. 2,  
pp. 161, 166, 236.
1905. *Mamaiidæ*, Stebbing, S.A. Crustacea, pt. 3, p. 22.
1908. *M.*, Stebbing, S.A. Crustacea, pt. 4, p. 2, and Proc. Biol. Soc.  
Washington, vol. xviii., p. 157.

## GEN. MAMAIA, Stebbing.

1905. *Mamaia*, Stebbing, S.A. Crustacea, pt. 3, p. 23.
1908. *M.*, Stebbing, S.A. Crustacea, pt. 4, p. 3.

## MAMAIA QUEKETTI, Stebbing.

1908. *Mamaia queketti*, Stebbing, S.A. Crustacea, pt. 4, in Ann. S.A.  
Mus., vol. vi., p. 3, pl. 27.  
Durban, specimen sent by J. F. Quekett, Esq. ; Port Eliza-  
beth, specimen sent by F. W. Fitzsimons, Esq.

## GEN. MICIPPA, Leach.

1817. *Micippa*, Leach, Zoological Miscellany, vol. iii., p. 15.
1895. *M.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxiv., pp. 167,  
238, 248.
1905. *M.*, Stebbing, S.A. Crustacea, pt. 3, p. 23.

## MICIPPA THALIA (Herbst).

1803. *Cancer thalia*, Herbst, Krabben und Krebse, vol. iii., pt. 3,  
p. 50, pl. 58, fig. 3.
1843. *Micippe t.*, Krauss, Südafrik. Crust., p. 51.  
On the rocky coast of Natal.
1905. *Micippa t.*, Stebbing, S.A. Crustacea, pt. 3, p. 24.  
Nos. 177, 178, from the Durban Museum.

## GEN. STENOCIONOPS, Leach.

1823. *Stenocionops*, Leach. In Desmarest, Dict. Sci. Nat., vol. xxviii., p. 266.  
 1825. *Pericera*, Latreille, Encycl. Méth., Hist. Nat. Insectes, vol. x., p. 699.  
 1897. *Stenocionops*, Rathbun, Proc. Biol. Soc. Washington, vol. xi p. 157.  
 1901. S., Rathbun, Bull. U.S. Fish. Comm. for 1900, vol. ii., p. 72.

The synonymy of this genus is due to Miss Rathbun, who has pointed out that the *Stenocionops* of Latreille is distinct from the earlier *Stenocionops* of Leach. Alcock divides the Maiinæ (my family Mamaiidæ) into three alliances, Maioida, *Stenocionopoida*, and *Periceroida*, names which are no longer tenable, now that the genus *Maia* in the first has become *Mamaia*, *Stenocionops*, Latreille, in the second has been changed to *Ophthalmias*, Rathbun, and *Pericera*, Latreille, in the third has fallen as a synonym to the true *Stenocionops* of Leach.

## STENOCIONOPS FURCATA (Olivier).

1791. *Cancer furcatus*, Olivier, Encycl. Méth., Hist. Nat. Insectes, vol. vi., p. 174.  
 1804. *Cancer cornudo*, Herbst, Krabben und Krebse, vol. iii., pt. 4, p. 6, pl. 59, fig. 6.  
 1834. *Pericera cornuta*, Milne-Edwards, Hist. Nat. Crust., vol. i., p. 335.  
 1886. *P. c.*, Miers, Challenger Brachyura, p. 76. Simon's Bay, 18-36 m.  
 1901. *Stenocionops furcata*, Rathbun, Bull. U.S. Fish. Comm. for 1900, vol. ii., p. 73.

Desmarest, Consid. gén. Crust., p. 153 footnote, 1825, makes *Maia taurus*, Lamarek, the type of *Stenocionops*, Leach, adding that M. Latreille refers to it the *Cancer corundo* of Herbst. *Corundo* is a misprint for *cornudo*, of which species *Maia taurus* is a synonym. This is recognised by Latreille under *Pericera*, Règne Animal, éd. 2, vol. iv., p. 59, 1829, but on the next page, under *Stenocionops*, he declares that Desmarest was in error in citing *Maia taurus* as type of the latter genus, without any allusion to Desmarest's statement that Latreille himself had referred *Cancer cornudo* to it. Latreille in 1825 and 1829 took *Cancer cervicornis*, Herbst, as the type of *Stenocionops*.



## GEN. SCHIZOPHRYS, White.

1848. *Schizophrys*, White, Ann. Nat. Hist., ser. 2, vol. ii., p. 282.  
 1886. *S.*, Miers, Challenger Brachyura, p. 66.  
 1895. *S.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxiv., pp. 166, 237, 243.

## SCHIZOPHRYS ASPERA (Milne-Edwards).

1834. *Mithrax asper*, Milne-Edwards, Hist. Nat. Crust., vol. i., p. 320.  
 1838. *M. quadridentatus*, M<sup>c</sup>Leay, Annulosa of S. Africa, p. 58.  
 1886. *Schizophrys aspera*, Miers, Challenger Brachyura, p. 67.  
 1893. *S. a.*, Rathbun, Proc. U.S. Nat. Mus., vol. xvi., p. 91.

Both Miers and Miss Rathbun prefix ?? to the name of M<sup>c</sup>Leay's Cape species in the synonymy. M<sup>c</sup>Leay himself notes that the species comes exceedingly close to *Mithrax dichotomus*, Latreille.

## FAMILY PARTHENOPIDÆ.

1895. *Parthenopina*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxiv., p. 258.  
 1905. *Parthenopidæ*, Stebbing, S.A. Crustacea, pt. 3, p. 26.

## GEN. PARTHENOPE, J. C. Fabricius.

1798. *Parthenope*, Fabricius, Suppl. Ent. Syst., p. 352.  
 1895. *P.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxiv., pp. 258, 279.  
 1905. *P.*, Stebbing, S.A. Crustacea, pt. 3, p. 27.

## PARTHENOPE HORRIDA (Linn.).

1758. *Cancer horridus*, Linn., Systema Naturæ, ed. 10, p. 629.  
 1798. *Parthenope horrida*, Fabricius, Suppl. Ent. Syst., p. 353.  
 1905. *P. h.*, Stebbing, S.A. Crustacea, pt. 3, p. 27. No. 177, Durban Museum.

## GEN. LAMBRUS, Leach.

1815. *Lambrus*, Leach, Trans. Linn. Soc., vol. xi., pp. 308, 310.  
 1895. *L.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxiv., p. 259.

A specimen (description still unpublished), belonging apparently to a division of the genus, was taken by Dr. Gilchrist, No. 227, Umsunduzi River, Pietermaritzburg.

## TRIBE CYCLOMETOPA.

1898. *Cyclometopa*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxvii., pt. 2, p. 67.
1899. *C.*, Alcock, J. A. S. B., vol. lxviii., pt. 2, p. 1.  
 Borradaile, Ann. Nat. Hist., Ser. 7, vol. xix., p. 468, 1907, and Calman, Crustacea, p. 315, 1909 (in Lankester's Treatise on Zoology), unite the *Cyclometopa* and *Catometopa* in a single group, named *Brachyrrhyncha*.

## FAMILY POTAMONIDÆ.

1896. *Potamonidæ*, Ortmann, Zoologische Jahrbücher, vol. ix., p. 445.
1899. *Thelphusidæ*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxviii., pt. 2, p. 2.
1904. *Potamonidæ*, Rathbun, Nouvelles Archives du Muséum d'Histoire Naturelle, Ser. 4, vol. vi., p. 244.
1910. *P.*, Alcock, Catal. Indian Decap. Crust., Brachyura, fasc. 2.  
 Alcock divides the family into two sections, dependent on character of the mandibular palp.

GEN. POTAMONAUTES, M<sup>c</sup>Leay.

1838. *Potamonautes*, M<sup>c</sup>Leay, Annulosa of S. Africa, p. 64.

Under "*Thelphusa perlata*, M. E.," M<sup>c</sup>Leay remarks: "I may take this occasion to observe, that in my cabinet I separate those species of *Thelphusa* which, like the present, have a transversal crest in front of the shell, and call them *Potamonautes*."

1905. *Potamon* (*Potamonautes*), Rathbun, Nouv. Archives Mus., vol. vii., p. 159.

In vol. vi., p. 237, Miss Rathbun says: "L'Afrique est le pays de *Potamonautes*, qui s'étend aussi, mais plus rarement, dans l'Inde et la Malaisie."

## \* POTAMONAUTES PERLATUS (Milne-Edwards).

1837. *Thelphusa perlata*, M.-Edw., Hist. Nat. Crust., vol. ii., p. 13.  
 Inhabits the Cape of Good Hope.
1838. *Thelphusa* (in cabinet *Potamonautes*) *perlata*, M<sup>c</sup>Leay, Annulosa of S. Africa, p. 64.



1843. *T. p.*, Krauss, Südafrik. Crust., p. 37, var. *a* in Natal and the Colony, var. *b* in the Colony, var. *c* in Natal.
1847. *T. p.*, White, List Crust. in Brit. Mus., p. 30.  
"Females. Cape of Good Hope." From Dr. Andrew Smith.
1858. *T. p.*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 101.  
In rivulets near Constantia at the Cape of Good Hope.
1865. *T. p.*, Heller, Novara Crustacea, p. 31. The Cape.
1882. *Telphusa p.*, Studer, Gazelle Crustacea, p. 12.  
On the strand of Chalk Bay, The Cape.
1886. *Thelphusa* (*Potamonautes*) *perlata*, Miers, Chall. Brachyura, p. 215.  
"South Africa, Wellington and Cape Town (in the rivers)."
1897. *Potamon* (*Potamonautes*) *perlatus*, Ortmann, Zool. Jahrb., vol. x., pp. 304, 307.  
Port Natal.
1904. *P. (P.) p.*, Doflein, Valdivia Brachyura, p. 105.  
"Port Elizabeth (Natal), Brook in the neighbourhood of the Kaffirs' kraal."
1905. *P. (P.) perlatus*, Rathbun, Nouv. Arch. Mus., vol. vii., p. 163;  
pl. 14, fig. 4 (in vol. vi., 1904).  
River Vaal, Transvaal; Cape of Good Hope.
1910. *P. p.*, Stebbing, S.A. Crustacea, pt. 5.  
No. 158, from "Princess Vlei," Cape Town; sent by Dr. Gilchrist.

POTAMONAUTES DEPRESSUS (Krauss).

1843. *Thelphusa depressa*, Krauss, Südafrik. Crust., p. 38, pl. 2,  
fig. 4, a, b, c.  
Krauss found it "only at a waterfall on the hills of Boschmannsrand in the neighbourhood of Pietermaritzburg in Natal, where it hides in the moss."
1905. *Potamon* (*Potamonautes*) *depressus*, Rathbun, Nouv. Arch. Mus., vol. vii., p. 169.

POTAMONAUTES INFLATUS (Milne-Edwards).

1853. *Thelphusa inflata*, M.-Edw., Ann. Sci. Nat., Ser. 3, vol. xx., p. 210.  
Port Natal.
1905. *Potamon* (*Potamonautes*) *inflatus*, Rathbun, Nouv. Arch. Mus., vol. vii., p. 174; pl. 15, fig. 2 (in vol. vi.).

POTAMONAUTES AUBRYI (Milne-Edwards).

1853. *Thelphusa aubryi*, M.-Edw., Ann. Sci. Nat., Ser. 3, vol. xx., p. 210.

1880. *T. emarginata*, Kingsley, Pr. Ac. Sci. Philad., p. 36.  
 1905. *Potamon (Potamonautes) aubryi*, Rathbun, Nouv. Arch. Mus., vol. vii., p. 191, and 1904, vol. vi., pl. 17, figs. 3, 4, 7.  
 Miss Rathbun expresses the opinion that Port Natal, assigned by Kingsley for this species, is probably erroneous, so that it remains doubtfully South African.

POTAMONAUTES POBEQUINI (Rathbun).

1904. *Potamon (Potamonautes) pobequini*, Rathbun, Nouv. Arch. Mus., vol. vi., p. 241, pl. 16, fig. 8, and 1905, vol. vii., p. 195.  
 1880. *Thelphusa aubryi*, Kingsley, Pr. Ac. Sci. Philad., p. 35.  
 For this species also Miss Rathbun considers Port Natal probably assigned in error as a place of origin by Kingsley on the faith of Dr. T. B. Wilson.

POTAMONAUTES SIDNEYI (Rathbun).

1904. *Potamon (Potamonautes) sidneyi*, Rathbun, Nouv. Arch. Mus., vol. vii., p. 165 (1905); pl. 14, fig. 5 (in vol. vi.).

Obtained in Natal by Mme. Sarah Abraham; another variety taken at Port Natal.

In 1847, List Crust. in Brit. Mus., p. 30, White records *Thelphusa indica*, Latr., including in the synonymy "*Potamonautes ind.* MacLeay, Ann. S. Afr.," and mentioning among specimens "Var. ? Male and female. Cape of Good Hope. Presented by — Townsend, Esq." There is, however, no *Potamonautes ind.* in MacLeay's work, and the name *Thelphusa indica*, White, is made a synonym of *Potamon (Potamon) bouvieri*, n. sp., by Miss Rathbun, in Nouv. Arch. Mus. Paris, Ser. 4, vol. vi., p. 293, 1904, without ratification of the Cape habitat.

GEN. TRICHODACTYLUS, Latreille.

1825. *Trichodactylus*, Latreille, Encycl. Méth., vol. x., p. 705.  
 1906. *T.*, Rathbun, Nouv. Arch. Mus. Paris, Ser. 4, vol. viii., p. 33.

TRICHODACTYLUS AFFINIS White.

1847. *Trichodactylus affinis*, White, List Crust. Brit. Mus., p. 31.  
 Without description. Specimens from "S. Africa. Presented by the Earl of Derby."  
 1906. *T. a.*, Rathbun, Nouv. Arch. Mus. Paris, Ser. 4, vol. viii., p. 74.  
 Miss Rathbun classes this as a *nomen nudum* for an intermediate species.



## FAMILY XANTHIDÆ.

1898. *Xanthidæ*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxvii., pt. 2, p. 69.  
 1899. *X.*, Alcock, J. A. S. B., vol. lxviii., pt. 2, p. 3.  
 1900. *X.*, Stebbing, S.A. Crustacea, pt. 1, p. 15.  
 1905. *Actæidæ*, Stebbing, S.A. Crustacea, pt. 3, p. 29.  
 1908. *Xanthidæ*, Stebbing, S.A. Crustacea, pt. 4, p. 6.

This family is divided by Alcock into two sections, the first containing his sub-families Xanthinæ, Actæinæ, and Chlorodinæ, the second his Menippinæ, Oziinæ, Pilumnidæ, and Eriphiinæ. The sub-family Xanthinæ is subdivided into six alliances. However necessary these intricacies of classification may be in a fully developed systematic treatise, I have not found it convenient to use them in the catalogue of a narrowly restricted local fauna, although, for convenience of reference, I follow the order in which the several genera are noticed by Alcock.

## GEN. LIOMERA, Dana.

1851. *Liomera*, Dana, Silliman's American Journal Sci. and Arts, Ser. 2, vol. xii., p. 124.  
 1898. *L.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxvii., pt. 2, pp. 72, 87.

## LIOMERA sp., Doflein.

1904. *Liomera* sp., Doflein, Valdivia Brachyura, p. 101.  
 A young female specimen, taken on the Agulhas Bank, from 102 m. depth, perhaps representing a new species.

## GEN. ATERGATIS, de Haan.

1833. *Atergatis*, de Haan, Crustacea Japonica, decas prima, p. 17.  
 1898. *A.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxvii., pt. 2, pp. 71, 94.

## ATERGATIS OCYROE (Herbst).

1801. *Cancer ocyroe*, Herbst, Krabben und Krebse, vol. iii., pt. 2, p. 20, pl. 54, fig. 2.  
 1835. *Atergatis floridus*, de Haan, Crust. Japon., decas secunda, p. 46.  
 1838. *A. compressipes*, McLeay, Annulosa of S. Africa, p. 59.  
 Cape.

1843. *A. floridus*, Krauss, Südafrik. Crust., p. 27.  
 At the mouth of the Umlaas River, in Natal.  
 1898. *A. f.*, Alcock, J. A. S. B., vol. lxvii., pt. 2, p. 98.  
 1907. *A. ocyroe*, Rathbun, Smithson. Misc. Coll., vol. xlix., p. 41  
 footnote.

ATERGATIS ROSEUS (Rüppell).

1830. *Carpilius roseus*, Rüppell, Red Sea Crabs, p. 13, pl. 3, fig. 3,  
 pl. 6, fig. 7, and *C. marginatus*, Rüppell, Red Sea Crabs,  
 p. 15, pl. 3, fig. 4.  
 1843. *Atergatis marginatus*, Krauss, Südafrik. Crust., p. 28.  
 In the coral banks of the Natal coast.  
 1898. *A. roseus*, Alcock, J. A. S. B., vol. lxvii., pt. 2, p. 97.

GEN. EUXANTHUS, Dana.

1851. *Euxanthus*, Dana, Silliman's Journ. Sci. and Arts, Ser. 2,  
 vol. xii., p. 125.

EUXANTHUS RUGULOSUS, Heller.

1865. *Euxanthus rugulosus*, Heller, Novara Crustacea, p. 12, pl. 2,  
 fig. 2, 2a.  
 From the Cape.

GEN. XANTHO, Leach.

1814. *Xantho*, Leach, Edinb. Encycl., vol. vii., p. 430.  
 1898. *X.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxvii., pt. 2, p. 112.

XANTHO HYDROPHILUS (Herbst).

1790. *Cancer hydrophilus*, Herbst, Krabben und Krebse, vol. i.,  
 pt. 8, p. 266, pl. 21, fig. 124.  
 1843. *Xantho affinis*, Krauss, Südafrik. Crust., p. 30.  
 "Very common under stones at Natal Point and at the  
 entrance to Natal Bay."  
 1908. *X. hydrophilus*, Stebbing, S.A. Crustacea, pt. 4, p. 7.  
 Durban. In 1907, Smithson. Misc. Coll., vol. xlix., p. 52,  
 Miss Rathbun still retains the name *Leptodius exaratus*  
 (Milne-Edwards) for *Xantho affinis*, de Haan.

XANTHO OBTUSUS, de Haan.

1835. *Xantho obtusus*, de Haan, Crustacea Japonica, decas secunda,  
 p. 57, pl. 13, fig. 5.

1843. *X. o.*, Krauss, Südafrik. Crust., p. 31.

“On the rocky coast of Natal; rare.”

XANTHO QUINQUEDENTATUS, Krauss.

1843. *Xantho quinquedentatus*, Krauss, Südafrik. Crust., p. 30, pl. 1 fig. 3, a-e.

“Under stones, at the entrance to Natal Bay; rare.”

XANTHO sp., Doflein.

1904. *Xantho* sp. Doflein, Valdivia Brachyura, p. 101.

Young specimens, akin to *X. exaratus* (M.-E.), which is regarded as a synonym of *X. hydrophilus*. They were taken in the Agulhas Current, from depths of 102 m. and 155 m.

GEN. ETISUS, Milne-Edwards.

1834. *Etisus*, Milne-Edwards, Hist. Nat. Crust., vol. i., p. 410.

1898. *E.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxxvii., pt. 2, pp. 72, 128.

ETISUS DENTATUS (Herbst).

1785. *Cancer dentatus*, Herbst, Krabben und Krebse, vol. i., pt. 6, p. 186, pl. 11, fig. 66.

1834. *Etisus d.*, M.-Edw., Hist. Nat. Crust., vol. i., p. 411.

1886. *E. d.*, Miers, Challenger Brachyura, p. 132, with reference to Natal in its distribution.

GEN. HALIMEDE, de Haan.

1835. *Halimede*, de Haan, Crustacea Japonica, decas secunda, p. 35.

HALIMEDE PISIFER, McLeay.

1838. *Halimede pisifer*, McLeay, Annulosa of S. Africa, p. 60.

1843. *H. p.*, Krauss, Südafrik. Crust., p. 28.

Krauss only repeats McLeay's comment that this species has affinity to the *Polydectus cupulifer* of Milne-Edwards.

GEN. ACTÆA, de Haan.

1833. *Actæa*, de Haan, Crustacea Japonica, decas prima, p. 18.

1905. *A.*, Stebbing, S.A. Crustacea, pt. 3, p. 29.



## \* ACTÆA GRANULATA (Audouin).

1826. *Cancer granulatus*, Audouin, Explication des Planches de Savigny (Crust. Égypt.), pl. 6, fig. 2.

1905. *Actæa granulata*, Stebbing, S.A. Crustacea, pt. 3, p. 30.

The specimen, No. 250, was obtained by Dr. Gilchrist at Umhloti River mouth, N.W. by W.  $\frac{3}{4}$  W., from 46 m. depth.

## ACTÆA RÜPPELLII (Krauss).

1843. *Ægle rüppellii*, Krauss, Südafrik. Crust., p. 28, pl. 1, fig. 1.

At the mouth of the Umlaas River, in Natal.

1861. *Actæa r.*, Heller, Beiträge zur Crustaceen-fauna des rothen Meeres, Sitzungsber. Ak. Wiss. Wien, vol. xciii., p. 316.

1898. *A. rüppellii*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxvii., p. 144.

## ACTÆA PARVULA (Krauss).

1833. *Menippe parvulus*, de Haan, Crust. Japon., decas prima, p. 21, 1833, specific name given without figure or description.

Specimen brought by Dr. Horstok from the Cape of Good Hope.

1843. *M. p.*, Krauss, Südafrik. Crust., p. 34, pl. 2, fig. 2, *a, b, c*.

A specimen found on the rocky coast of Natal, described and figured by Krauss, for whom it was identified with the Cape specimen by de Haan.

1887. *Actæa parvula*, de Man, Journ. Linn. Soc., vol. xxii., No. 136, p. 27.

Miers in 1886, Challenger Brachyura, p. 119, suggests that this may be a species of *Actumnus*, Dana.

## GEN. PHYMODIUS, A. Milne-Edwards.

1863. *Phymodius*, A. Milne-Edwards, Ann. Sci. Nat., Ser. 4, Zool., vol. xx., p. 283.

1898. *P.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxvii., pp. 74, 161.

## PHYMODIUS UNGULATUS (Milne-Edwards).

1834. *Chlorodius unguatus*, M.-Edw., Hist. Nat. Crust., vol. i., p. 400, pl. 16, figs. 6-8.

1843. *Xantho dehaanii*, Krauss, Südafrik. Crust., p. 29, pl. 1, fig. 2.

Rather rare in the rock crannies at Natal Point.

1873. *Phymodius unguulatus*, A. Milne-Edwards, Nouv. Archiv. Mus., vol. ix., p. 218.  
 1898. *P. u.*, Alcock, J. A. S. B., vol. lxvii., p. 162.

The numerous references given by Alcock do not include *Chlorodius u.*, Paulson, Red Sea Crustacea, p. 36, 1875. Several authors refer to Savigny's Crust. Égypte, pl. 5, fig. 6, as representing this species. But Nobili, Ann. Sci. Nat., Ser. 9, Zool., vol. iv., p. 265, 1907, identifies that figure with *Pilodius granulatus*, Targioni Tozzetti, Magenta Brachyura, p. 50, 1877, which Nobili himself accepts as a distinct species of *Phymodius*.

#### GEN. CHLORODOPSIS, A. Milne-Edwards.

1873. *Chlorodopsis*, A. Milne-Edwards, Nouv. Archiv. Mus., vol. ix., p. 227.  
 1898. *C.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxvii., pp. 74, 165.

#### CHLORODOPSIS AREOLATA (Milne-Edwards).

1834. *Chlorodius areolatus*, M.-Edw., Hist. Nat. Crust., vol. i., p. 400.  
 1838. *C. perlatus*, McLeay, Annulosa of S. Africa, p. 59.  
 1843. *C. p.*, Krauss, Südafrik. Crust., p. 31.  
 1898. *Chlorodopsis areolata*, Alcock, J. A. S. B., vol. lxvii., p. 166.

It has been pointed out by Miss Rathbun that *Clorodius*, Leach, is a synonym of *Atelecycclus*, Leach. *Chlorodius*, Milne-Edwards, was identified with *Clorodius*, Leach, though it is in fact distinct. Of the species assigned to it some have been assigned to other genera; for *C. niger* (Forskål) Miss Rathbun proposes the generic name *Chlorodiella*, Proc. Biol. Soc. Washington, vol. xi., p. 157, 1897.

#### GEN. PILODIUS, Dana.

1852. *Pilodius*, Dana, U.S. Expl. Exp., vol. xiii., pp. 149, 216.  
 1902. *P.*, de Man, Abhandl. Senck. Gesellsch., vol. xxv., p. 619.  
 1907. *P.*, Nobili, Ann. Sci. Nat., Ser. 9, Zool., vol. iv., pp. 267, 268, footnote.

#### PILODIUS MARTENSII (Krauss).

1843. *Menippe martensii*, Krauss, Südafrik. Crust., p. 34, pl. 2, fig. 1, a, b, c.

"This species lives on the Natal coast in the sinuosities

of *Eschara foliacea*, L., and is very sluggish. It fixes itself with the biuncinate fingers so firmly in the pores of the polyp that it is only rarely obtained undamaged."

1907. *P. martensi*, Nobili, Ann. Sci. Nat., Ser. 9, Zool., vol. iv., p. 268.

Nobili remarks that his specimens from the Red Sea agree perfectly with Krauss's species, although that species has nothing to do with *Menippe*, as that genus is now conceived and as already recognised by de Man. The reference to de Man is not specified, but may probably be to that author's discussion of *Menippe*, de Haan, and *Myomenippe*, Hilgendorf, in Journ. Linn. Soc., vol. xxii., No. 136, pp. 36-43, 1887.

#### GEN. EPIXANTHUS, Heller.

1861. *Epixanthus*, Heller, Sitzungsber. Ak. Wiss. Wien, vol. xliii., p. 323.  
1898. *E.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxvii., p. 184.

#### EPIXANTHUS FRONTALIS (Milne-Edwards).

1834. *Ozius frontalis*, M.-Edw., Hist. Nat. Crust., vol. i., p. 406.  
1843. *O. f.*, Krauss, Südafrik. Crust., p. 31.  
"Rather rare, under stones at Natal Point; very sluggish."  
1865. *Epixanthus f.*, Heller, Novara Crustacea, p. 20.  
1898. *E. f.*, Alcock, J. A. S. B., vol. lxvii., p. 185.  
1907. *E. f.*, Rathbun, Smithsonian. Misc. Coll., vol. xlix., p. 60 footnote.

#### GEN. PILUMNUS, Leach.

1815. *Pilumnus*, Leach, Trans. Linn. Soc., vol. xi., p. 321.  
1898. *P.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxvii., pp. 75, 190.

#### PILUMNUS XANTHOIDES, Krauss.

1843. *Pilumnus xanthoides*, Krauss, Südafrik. Crust., p. 32, pl. 1, fig. 6.

"Very frequent in the sinuosities of *Eschara foliacea*, L., which forms little banks at Natal Point."

Miers, Challenger Brachyura, p. 147, 1886, observes: "The *Pilumnus xanthoides*, Krauss, from Natal, which is included by Dr. Kossmann in this genus, differs from the typical *Pilummi* in the form of the antero-lateral marginal teeth."



## PILUMNUS GRANULATUS, Krauss.

1843. *Pilumnus granulatus*, Krauss, Südafrik. Crust., p. 33, pl. 1, fig. 7.

"At Natal Point, under stones; rare."

## \* PILUMNUS VERRUCOSIPES, Stimpson.

1858. *Pilumnus verrucosipes*, Stimpson, Proc. Ac. Sci. Philad., vol. x., p. 36.

Simon's Bay, in 20 m. depth.

1900. *P. v.*, Stebbing, S.A. Crustacea, pt. i., p. 15.

No. 26, sent by Dr. Gilchrist, from Mossel Bay, at 18 m. depth.

1904. *P. v.*, Doflein, Valdivia Brachyura, p. 100, pl. 32, figs. 3, 4.

At Plettenberg Bay, Cape Colony, in shallow water.

1907. *P. v.*, Stimpson, Smithson. Misc. Coll., vol. xlix., p. 67, pl. 8 (facing p. 66), fig. 5.

## GEN. EURYCARCINUS, A. Milne-Edwards.

1867. *Eurycarcinus*, A. Milne-Edwards, Ann. Soc. Entomol. France, Ser. 4, vol. vii., p. 276.

1898. *E.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxxvii., pp. 75, 209.

## EURYCARCINUS NATALENSIS (Krauss).

1843. *Galene natalensis*, Krauss, Südafrik. Crust., p. 31, pl. 1, fig. 4.

"Under stones and in holes of the rocks at the mouth of the Umlaas River in Natal."

Under *Pseudozoeus*, Dana, Miers, Challenger Brachyura, p. 141, expresses the opinion that that genus is very nearly allied to *Menippe*, de Haan, and on the following page says: "*Eurycarcinus*, A. Milne-Edwards, is also very nearly allied to this genus, and should, perhaps, not be separated from it." The typical species, *Eurycarcinus grandidieri*, from Zanzibar, is, he thinks, identical with *Galene natalensis*, Krauss. The latter view is endorsed by Ortmann, 1893, Zool. Jahrb., vol. vii., p. 434, and by Nobili, 1907, Ann. Sci. Nat., Ser. 9, vol. iv., p. 289. But Alcock, 1898, J. A. S. B., vol. lxxvii., p. 211, describes *E. grandidieri*, without taking notice of *E. natalensis*.

## GEN. ERIPHIA, Latreille.

1817. *Eriphia*, Latreille, Règne Animal, vol. iii., p. 18.

1898. *E.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxxvii., pp. 76, 213.

ERIPHIA SMITHII, M<sup>c</sup>Leay.

1838. *Eriphia smithii*, M<sup>c</sup>Leay, Annulosa of S. Africa, p. 60, with  
*E. fordii*, M<sup>c</sup>Leay, *ibid*.
1843. *E. s.*, Krauss, Südafrik. Crust., p. 36, pl. 2, fig. 3, *a-e*.  
"On the Natal coast and especially at Natal Point, where  
they keep in holes and crannies of the rocks, but often their  
holes are so small that they have only just room in them, and  
not enough for turning round."
1898. *E. levimana*, var. *Smithii*, Alcock, J. A. S. B., vol. lxvii.,  
p. 216.
1907. *E. l.*, var. *Smithii*, Nobili, Ann. Sci. Nat., Ser. 9, vol. iv.,  
p. 291.
1907. *Eriphia sebana smithii*, Rathbun, Smithsonian. Misc. Coll., vol.  
xlix., p. 72 footnote, correction of *E. smithii*, Stimpson.

Miss Rathbun, *ibid.*, gives *Eriphia sebana* (Shaw) as correction of *Eriphia levimana*, Latreille, so named by Stimpson, though his references show that the name *E. levimana* should be attributed to Guérin, not Latreille.

## ERIPHIA SCABRICULA, Dana.

1843. *Eriphia gonagra*, Krauss, Südafrik. Crust., p. 36.  
"In the rock crannies at the mouth of the Umlaas River in  
Natal."
- The specific name used by Krauss, though earlier than Dana's, is rejected, because the species is not, as Krauss supposed, identical with that so named by Milne-Edwards, and founded on the *Cancer gonagra* of Fabricius.
1852. *E. scabricula*, Dana, U.S. Expl. Exp., vol. xiii., p. 247, pl. 14,  
figs. 5, *a, b*.
1898. *E. scabricula*, Alcock, J. A. S. B., vol. lxvii., p. 216.

## GEN. TRAPEZIA, Latreille.

1825. *Trapezia*, Latreille, Encycl. Méth., vol. 10, p. 695.  
Only the French form, Trapézie, of this name is given by Latreille in his Fam. Nat. du Règne Animal, p. 269, 1825.
1838. *Grapsillus*, M<sup>c</sup>Leay, Annulosa of S. Africa, p. 67.
1843. *Trapezia*, Krauss, Südafrik. Crust., p. 35.
1897. *Grapsillus*, Rathbun, Proc. Biol. Soc. Washington, vol. xi.,  
p. 165.

The preference is given to M<sup>c</sup>Leay's generic name on the ground that *Trapezia* was preoccupied by *Trapezium*,

Humphrey, 1797, but *Trapezia* and *Trapezium* are not the same, as subsequently recognised by Miss Rathbun.

1898. *Trapezia*, Alcock, J. A. S. B., vol. lxvii., pp. 76, 217.

#### TRAPEZIA CYMODOCE (Herbst).

1801. *Cancer cymodoce*, Herbst, Krabben und Krebse, vol. iii., pt. 2, p. 22, pl. 51, fig. 5.

1826. *Trapezia c.*, Audouin, Crust. Égypte, p. 85, pl. 5, fig. 2 (Savigny).

1838. ? *Grapsillus dentatus*, McLeay, Annulosa of S. Africa, p. 67, pl. 3.

1843. *Trapezia ferruginea*, Krauss, Südafrik. Crust., p. 35.

Krauss identifies McLeay's species both with Latreille's *T. f.* and with Audouin's *T. c.*, and Miers, Challenger Brachyura, p. 165, considers these identifications as perhaps correct.

1898. *T. cymodoce*, Alcock, J. A. S. B., vol. lxvii., p. 219.

Alcock leaves unnoticed McLeay's *G. dentatus*.

#### TRAPEZIA FERRUGINEA, Latreille.

1825. *Trapezia ferruginea*, Latreille, Encycl. Méth., vol. x., p. 695.

1838. *Grapsillus subinteger*, McLeay, Annulosa of S. Africa, p. 67.

Except referring it to *Trapezia*, Krauss expresses no opinion on this species.

1886. *Trapezia cœrulea*, Miers, Challenger Brachyura, p. 165.

Miers doubtfully identifies McLeay's species with the earlier *T. cœrulea*, described by Rüppell.

1898. *T. ferruginea*, Alcock, J. A. S. B., vol. lxvii., p. 220.

Alcock distinguishes this species, to which he refers *G. subinteger*, from *T. cymodoce* (Herbst), with which he unites *T. cœrulea*, of Heller and presumably of Rüppell.

#### TRAPEZIA MACULATA (McLeay).

1838. *Grapsillus maculatus*, McLeay, Annulosa of S. Africa, p. 67.

1843. *Trapezia rufopunctata*, Krauss, Südafrik. Crust., p. 36.

Krauss only gives this identification of McLeay's species with that of Herbst as probable.

1886. *T. r.*, Miers, Challenger Brachyura, p. 165.

1898. *T. maculata*, Alcock, J. A. S. B., vol. lxvii., p. 221.

1907. *T. m.*, Stimpson, Smithson. Misc. Coll., vol. xlix., p. 73, with "*Trapezia cymodoce maculata* (McLeay)" in footnote by Rathbun.



## GEN. TETRALIA, Dana.

1851. *Tetralia*, Dana, Silliman's Journ. Sci. and Arts, Ser. 2, vol. xii., p. 128.  
1900. *T.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxvii., pp. 76, 223.

## TETRALIA GLABERRIMA (Herbst).

1790. *Cancer glaberrimus*, Herbst, Krabben und Krebse, vol. i., pt. 8, p. 262, pl. 20, fig. 115.  
1843. *Trapezia glaberrima*, Krauss, Südafrik. Crust., p. 35.  
From the coast of Natal.  
1852. *Tetralia g.*, Dana, U.S. Expl. Exp., vol. xiii., p. 263, pl. 16, fig. 3.  
1898. Alcock, J. A. S. B., vol. lxvii., p. 223.

## FAMILY PORTUNIDÆ.

1899. *Portunidæ*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxviii., pt. 2, pp. 4, 5.  
1908. *P.*, Stebbing, S.A. Crustacea, pt. 4, p. 8.  
Alcock divides the family into four sub-families—Carcininæ, Portuninæ, Caphyrinæ, Lupinæ.

## GEN. PORTUMNUS, Leach.

1814. *Portumnus*, Leach, Edinb. Encycl., vol. vii., p. 429 (the name mentioned on p. 391).  
1838. *Xaiva*, M<sup>c</sup>Leay, Annulosa of S. Africa, p. 62.  
1886. *Portumnus*, Miers, Challenger Brachyura, p. 170.  
1899. *P.*, Alcock, J. A. S. B., vol. lxviii., p. 7.

PORTUMNUS PULCHELLUS (M<sup>c</sup>Leay).

1838. *Xaiva pulchella*, M<sup>c</sup>Leay, Annulosa of S. Africa, p. 62, pl. 3.  
1843. *X. p.*, Krauss, Südafrik. Crust., p. 27.  
Krauss only observes that he has not found this species.

## GEN. OVALIPES, Rathbun.

1833. *Anisopus*, de Haan (preocc.), Crust. Japonica, decas prima, p. 13.  
1838. *A.*, M<sup>c</sup>Leay, Annulosa of S. Africa, p. 62.

1843. *A.*, Krauss, Südafrik. Crust., p. 27.  
 1898. *Ovalipes*, Rathbun, Proc. U.S. Mus., vol. xxi., p. 597.  
 1902. *O.*, Stebbing, S.A. Crustacea, pt. 2., p. 12.

\* *OVALIPES TRIMACULATUS* (de Haan).

1833. *Corystes* (*Anisopus*) *trimaculata*, de Haan, Crust. Japon., decas prima, p. 13.

Obtained by Dr. Horstok from the shore of the Cape of Good Hope.

1838. *A. trimaculatus*, McLeay, Annulosa of S. Africa, p. 62.

1843. *A. t.*, Krauss, Südafrik. Crust., pp. 12, 27.

Very common in Table Bay.

1902. *Ovalipes t.*, Stebbing, S.A. Crustacea, pt. 2, p. 13.

No. 58, sent by Dr. Gilchrist, from False Bay.

1904. *O. t.*, Doflein, Valdivia Brachyura, p. 92, pl. 32, fig. 6.

Cape Agulhas, from 80 m. depth; Algoa Bay, at 40 m.; Port Elizabeth, Natal.

GEN. *CHARYBDIS*, de Haan.

1833. *Charybdis*, de Haan, Crust. Japonica, decas prima, p. 10.

1902. *C.*, Stebbing, S.A. Crustacea, pt. 2, p. 9.

\* *CHARYBDIS CRUCIATUS* (Herbst).

1794. *Cancer cruciatus* Herbst, Krabben und Krebse, vol. ii., pt. 5, p. 155, pl. 8, fig. 3, pl. 38, fig. 1.

1902. *Charybdis c.*, Stebbing, S.A. Crustacea, pt. 2, p. 9.

No. 154, sent by Dr. Gilchrist, from Port Alfred.

*CHARYBDIS SEXDENTATA* (Herbst).

1783. *Cancer sexdentatus*, Herbst, Krabben und Krebse, vol. i., pts. 2-5, p. 153, pl. 7, fig. 2.

1906. *Charybdis japonica*, Rathbun, Bull. U.S. Fish. Comm. for 1903, pt. 3, p. 872, pl. 13, fig. 2.

1907. *C. j.*, Rathbun, Smithson. Misc. Coll., vol. xlix., p. 81 footnote.

Miss Rathbun quotes A. Milne-Edwards (*Goniosoma japonicum*, Arch. Mus. Hist. Nat. Paris, vol. x., p. 373, 1861) as authority for this specific name, given as a correction of Stimpson's "*Charybdis sexdentata* (Herbst) de Haan." In 1887 de Man, J. Linn. Soc., vol. xxii. No. 137, pp. 85, 88, discusses "*Goniosoma japonicum*, de Haan," implying that the species is de Haan's *sexdentatus*, not Herbst's.

1908. *C. sexdentata*, Stebbing, S.A. Crustacea, pt. 4, p. 10.  
From the Durban Museum.

## CHARYBDIS NATATOR (Herbst).

1794. *Cancer natator*, Herbst, Krabben und Krebse, vol. ii., pt. 5,  
p. 156, pl. 40, fig. 1.  
1843. *Charybdis granulatus*, Krauss, Südafrik. Crust., p. 24.  
In Natal Bay at low tide.  
1908. *C. natator*, Stebbing, S.A. Crustacea, pt. 4, p. 9, pls. 28, 29  
(Annals S.A. Mus., vol. vi., pls. 2, 3). Durban Museum.

## CHARYBDIS SMITHII, McLeay.

1838. *Charybdis smithii*, McLeay, Annulosa of S. Africa, p. 61.  
1843. *C. s.*, Krauss, Südafrik. Crust., p. 24.  
Krauss merely mentions the species, on which I have not  
yet found any light thrown by subsequent authors.

## GEN. LUPA, Leach.

1813. *Lupa*, Leach, Edinb. Encycl., vol. vii., p. 390.  
1899. *Neptunus*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxxviii. pt. 2,  
pp. 11, 28.  
1908. *Lupa*, Stebbing, S.A. Crustacea, pt. 4, p. 11.

## LUPA PELAGICA (Linn.).

1758. *Cancer pelagicus*, Linn., Syst. Nat., ed. 10, p. 626.  
1813. *Lupa pelagica*, Leach, Edinb. Encycl., vol. vii., p. 390.  
1908. *L. p.*, Stebbing, S.A. Crustacea, pt. 4, p. 12.  
Durban Museum.

## \* LUPA SANGUINOLENTA (Herbst).

1783. *Cancer sanguinolentus*, Herbst, vol. i., pts. 2-5, p. 161, pl. 8,  
figs. 56, 57.  
1902. *Lupa sanguinolenta*, Stebbing, S.A. Crustacea, pt. 2, p. 11.  
No. 31, obtained by Dr. Gilchrist two and a half miles off  
Cape St. Blaize, Durban, Natal.

## GEN. ACHELOUS, de Haan.

1833. *Achelous*, de Haan, Crustacea Japonica, decas prima, p. 8.



ACHELOUS CRASSIMANUS, M<sup>c</sup>Leay.

1838. *Achelous crassimanus*, M<sup>c</sup>Leay, Annulosa of S. Africa, p. 61.

M<sup>c</sup>Leay follows the brief descriptions by the note: "This large crab has a shell which is about five inches long by seven wide. The teeth of the cephalothorax are triangular, sharp, and nearly equal. The fore-feet are nearly equal in size. The abdomen of male has seven joints. It has been only known, as yet, to occur in deep holes, which it makes in the mud islands near the mouth of the Zwartkops River—islands that are only visible at low water."

1843. *A. c.*, Krauss, Südafrik. Crust., p. 23.

Krauss adds nothing to M<sup>c</sup>Leay's account, except that the mouth of the Zwartkop is in the district Uitenhage. In the immediately following notice of *Charybdis smithii*, he declares that M<sup>c</sup>Leay never specifies the locality at which a species was found, although the case of *Achelous crassimanus* is an obvious exception. It is not improbable that Alcock's suggestion may be right (J. A. S. B., vol. lxviii., p. 28) that M<sup>c</sup>Leay's species is a synonym of *Scylla serrata* (Forskål). But the pleon of the male in that genus is of five segments, while in M<sup>c</sup>Leay's species it is said to be of seven.

## GEN. SCYLLA, de Haan.

1833. *Scylla*, de Haan, Crustacea Japonica, decas prima, p. 11.

1899. S., Alcock, Journ. Asiat. Soc. Bengal, vol. lxviii., pt. 2, p. 27.

## SCYLLA SERRATA (Forskål).

1775. *Cancer serratus*, Forskål, Descript. Anim. in itin. orientali, p. 90.

1843. *Scylla serrata*, Krauss, Südafrik. Crust., pp. 12, 25.

"This species is at home at the mouths of some little brooks in Natal Bay, where it digs large and deep holes in the mud among the roots of *Rhizophora mucronata*, Lam., and *Bruquiera gymnorhiza*, Lam."

Krauss also declares it to be the largest and strongest species among the South African Crustacea, giving its breadth as six inches one line and length as four inches two lines. These measurements are inferior to those given by M<sup>c</sup>Leay for his *Achelous crassimanus*. But Krauss's account on the whole makes it almost certain that M<sup>c</sup>Leay's species should be included under Forskål's, the chief doubt arising from the

circumstance that Krauss himself, on p. 20, as well as on pp. 23, 25, keeps them distinct, without a hint of their probable identity.

1893. *S. s.*, Stebbing, History of Crustacea, p. 69.

1899. *S. s.*, Alcock, J. A. S. B., vol. lxviii., pt. 2, p. 27.

In 1847 the List of Crustacea in the British Museum, drawn up by Adam White, contains the entry at p. 26: "*Scylla crassimanus. Achelous c.*, Macleay, Ann. S. Afr., 61. Female. S. Africa (mouth of the Zwartkops River). Presented by Dr. Andrew Smith."

#### GEN. THALAMITA, Latreille.

1829. *Thalamita*, Latreille, Règne Animal, éd. 2, vol. iv., p. 33, footnote.

1899. *T.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxviii., pt. 2, pp. 11, 72.

#### THALAMITA ADMETE (Herbst).

1803. *Cancer admete*, Herbst, Krabben und Krebse, vol. iii., pt. 3, p. 40, pl. 57, fig. 1.

1843. *Thalamita a.*, Krauss, Südafrik. Crust., p. 24.

Krauss distinguishes var. *a* and var. *b*, both from Natal Bay.

1899. *T. admeta*, Alcock, J. A. S. B., vol. lxviii., pp. 74, 82.

#### THALAMITA PRYMNA (Herbst).

1803. *Cancer prymna*, Herbst, Krabben und Krebse, vol. iii., pt. 3, p. 41, pl. 57, fig. 2.

1843. *Thalamita p.*, Krauss, Südafrik. Crust., p. 25.

From Natal Bay.

1899. *T. p.*, Alcock, J. A. S. B., vol. lxviii., pp. 73, 78.

#### THALAMITA CRENATA, Milne-Edwards.

1834. *Thalamita crenata*, Milne-Edwards, Hist. Nat. Crust., vol. i., p. 461.

1843. *T. c.*, Krauss, Südafrik. Crust., p. 25.

Krauss observes that he found this and the two preceding species "on the sandy places of Natal Bay in depressions under timber and pieces of rock, where they appear to have their permanent location; for on them all occurred now and again young species of *Balanus radiatus*, Br., which is found

frequently in the Bay, seated either on the carapace or on the chelipeds and ambulatory feet." In the Catalogue of Thyrostraca reasons are given for calling the cirripede here mentioned *Balanus amphitrite*, Darwin.

1899. *T. c.*, Alcock, J. A. S. B., vol. lxviii., pp. 73, 76.

On the latter page Alcock endorses "Kossmann's view as to the specific identity of all the *Thalamitas* with an eight-lobed front combined with a very broad basal antenna-joint." He considers *Thalamita prymna*, *crenata*, *danae*, *stimpsoni*, and *picta* as all synonymous, though he prefers, for convenience, to treat these usually accepted species as distinct.

### FAMILY CANCRIDÆ.

1899. *Cancridæ*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxviii., pt. 2, pp. 4, 9.

Alcock divides this family into five sub-families—*Cancrinæ*, *Pirimelinæ*, *Thiinæ*, *Atelecyclinæ*, *Acanthocyclinæ*—with a possible sixth, *Trichiinæ*, which, however, may constitute, he thinks, a distinct family.

#### GEN. KRAUSSIA, Dana.

1852. *Kraussia*, Dana, U.S. Expl. Exp., vol. xiii., pp. 297, 300.

1899. *K.*, Alcock, J. A. S. B., vol. lxviii., pp. 96, 97.

#### KRAUSSIA RUGULOSA (Krauss).

1843. *Platyonichus rugulosus*, Krauss, Südafrik. Crust., p. 26, pl. 1, fig. 5, *a-d*.

Under stones at Natal Point.

1852. *Kraussia rugulosa*, Dana, U.S. Expl. Exp., vol. xiii., pp. 301, 302, pl. 19, fig. 1, *a-f*.

#### GEN. ATELECYCLUS, Leach.

1814. *Atelecyclus*, Leach, Edinb. Encycl., vol. vii., p. 430.

1894. *A.*, A. Milne-Edwards and Bouvier, Hirondelle Brachyura, Camp. Sci. Monaco, vol. vii., p. 50.

#### \* ATELECYCLUS SEPTEMDENTATUS (Montagu).

1813. *Cancer Hippa septemdentatus*, Montagu, Trans. Linn. Soc., vol. xi., pt. 1, p. 1, pl. 1, fig. 1.

1814. *Atelecyclus s.*, Leach, Edinb. Encycl., vol. vii., p. 430.



1815. *A. heterodon*, Leach, Malacostraca Podophthalmata Britannicæ, text to plate 2.  
 1893. *A. septemdentatus*, Stebbing, History of Crustacea, p. 75.  
 1894. *A. heterodon*, A. Milne-Edwards and Bouvier, Hironnelle Brachyura, p. 50, pl. 5, figs. 6-11.  
 No. 72 sent by Dr. Gilchrist from False Bay, 33 m. depth, greatly extends the range of this species southward.

## FAMILY CORYSTIDÆ.

1899. *Corystidæ*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxxviii., pt. 2, pp. 5, 103.

### GEN. NAUTILOCORYSTES, Milne-Edwards.

1837. *Nautilocorystes*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 149.  
 1900. *N.*, Stebbing, S.A. Crustacea, pt. 1, p. 16.

### \* NAUTILOCORYSTES OCTODENTATUS (de Haan).

1833. *Corystes (Dicera) 8-dentata*, de Haan, Crustacea Japonica, decas prima, p. 15.  
 Brought from the Cape by Dr. Horstok.  
 1837. *Nautilocorystes ocellatus*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 149.

Inhabits the Cape of Good Hope.

Both de Haan and Milne-Edwards give the reference to Latreille, Règne Animal, éd. 2, vol. iv., p. 53, where Latreille remarks in regard to *Cancer personatus*, Herbst, that another species attributable to the genus *Corystes* has been brought from the Cape by the late Delalande, naturalist-traveller. The present species is doubtless intended.

1843. *Dicera 8-dentata*, Krauss, Südafrik. Crust., p. 27.  
 1847. *Nautilocorystes ocellatus*, White, List Crust. Brit. Mus., p. 53, "C. G. Hope."  
 1866. *D. ocellata*, Heller, Novara Crustacea, p. 70.  
 From the Cape.  
 1900. *Nautilocorystes octodentatus*, Stebbing, S.A. Crustacea, pt. 1, p. 17.  
 No. 30 obtained by Dr. Gilchrist "in trawl 3 miles off Cape St. Blaize." No. 14930, sent by Dr. Péringuey, from Saldanha Bay.

1907. *N. o.*, Rathbun, Smithson. Misc. Coll., vol. xlix., p. 89 footnote, correction of *N. ocellatus* used by Stimpson, who states that the species was "dredged on a sandy bottom, in 12 fathoms, in Simons Bay, Cape of Good Hope."

### TRIBE CATOMETOPA

1900. *Catometopa*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxi., pt. 2, p. 279.

Alcock divides this branch into nine families, which, with some slight alterations in the form of the names, may conveniently be accepted for the present catalogue. They are the Goneplacidæ, Grapsidæ, Gecarcinidæ, Ocypodidæ, Pinnotheridæ, Myctiridæ, Hymenosomatidæ, Palicidæ, and Ptenoplacidæ.

### FAMILY GONEPLACIDÆ.

1900. *Gonoplacidæ*, Alcock, J. A. S. B., vol. lxi., pp. 282, 283, 286, 292, 297.

1902. *Goneplacidæ*, Stebbing, S.A. Crustacea, pt. 2, p. 15.

1905. *Carcinoplacidæ*, Stebbing, S.A. Crustacea, pt. 3, p. 34.

Alcock divides this family into five sub-families, named Pseudorhombilinæ, Gonoplacinæ, Prionoplacinæ, Rhizopinæ, Hexapodinæ, the first corresponding with the family Carcinoplacidæ, so named by Stimpson in 1858, and by Ortmann in 1894, Zool. Jahrb., vol. vii., p. 685.

### GEN. GONEPLAX, Leach.

1814. *Goneplax*, Leach, Edinb. Encycl., vol. vii., p. 430.

1902. *G.*, Stebbing, S.A. Crustacea, pt. 2, p. 15.

### \* GONEPLAX ANGULATA (Pennant).

1777. *Cancer angulatus*, Pennant, British Zoology, vol. iv., p. 7, pl. 5, fig. 10.

1902. *Goneplax angulata*, Stebbing, S.A. Crustacea, pt. 2, p. 15.

No. 25, sent by Dr. Gilchrist, from trawling 11 miles off Cape St. Blaize.

1904. *G. a.*, Doflein, Valdivia Brachyura, p. 117, Francis Bay; Algoa Bay, from 40 cm. depth; Agulhas Bank, from 117 m.

GEN. GERYON, Kröyer.

1835. *Geryon*, Kröyer, Naturhistorisk Tidsskrift, vol. i., pt. 1, pp. 13, 20.  
 1904. *G.*, Doflein, Valdivia Brachyura, p. 105.  
 1905. *G.*, Stebbing, S.A. Crustacea, pt. 3, p. 34.

\* GERYON QUINQUEDENS, S. I. Smith.

1879. *Geryon quinquedens*, S. I. Smith, Trans. Connecticut Acad., vol. v., pt. 1, p. 35, pl. 9, figs. 1-2.  
 1905. *G. q.*, Stebbing, S.A. Crustacea, pt. 3, p. 36.  
 No. 206, obtained by Dr. Gilchrist, from Cape Point Light-house, N.E.  $\frac{3}{4}$  E., 29 miles; at 860 m. depth.

GEN. CARCINOPLAX, Milne-Edwards.

1852. *Carcinoplax*, Milne-Edwards, Ann. Sci. Nat. Zool., Ser. 3, vol. xviii., p. 164.  
 1904. *C.*, Doflein, Valdivia Brachyura, p. 114.  
 1905. *C.*, Stebbing, S.A. Crustacea, pt. 3, p. 37.

\* CARCINOPLAX LONGIMANUS (de Haan).

1833. *Cancer (Curtonotus) longimanus*, de Haan, Crustacea Japonica, decas prima, p. 20.  
 1835. *C. (C.) l.*, de Haan, Crust. Japon., decas secunda, p. 80, pl. 50, fig. 1.  
 1852. *Carcinoplax l.*, Milne-Edwards, Ann. Sci. Nat. Zool., Ser. 3, vol. xviii., p. 164.  
 1905. *C. l.*, Stebbing, S.A. Crustacea, pt. 3, p. 37.  
 No. 204, specimens procured by Dr. Gilchrist near Kowie, lat. 30° 45' 20" S., long. 26° 44' 20" E., between 73 and 79 m. depth.

GEN. PILUMNOPLAX, Stimpson.

1858. *Pilumnoplax*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 93.  
 1900. *P.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxix., pt. 2, pp. 292, 298, 311.  
 1904. *P.*, Doflein, Valdivia Brachyura, p. 119.

PILUMNOPLAX VESTITUS (de Haan).

1835. *Cancer (Curtonotus) vestitus*, de Haan, Crustacea Japonica, decas secunda, p. 51, pl. 5, fig. 3



1838. *Curtonotus v.*, M<sup>c</sup>Leay, Annulosa of S. Africa, p. 61.

1843. *C. v.*, Krauss, Südafrik. Crust., p. 33.

Krauss says: "Of this long-haired crab I found only a single female specimen on the rocky coast of Natal, 6 lines broad and 8 lines long."

1886. *Pilumnoplax vestita*, Miers, Challenger Brachyura, p. 227.

#### PILUMNOPLAX HETEROCHIR (Studer).

1882. *Pilumnus heterochir*, Studer, Gazelle Crust., Abhandl. K. Ak. Wiss. Berlin, pt. 2, pp. 6, 11, pl. 1, figs. 3 *a-d*.

South of the Cape of Good Hope, lat. 34° 13' 6" S., long. 15° 0' 7" E., from 220 m. depth.

1885. *Pseudorhombila (Pilumnoplax) normani*, Miers, Narrative Challenger Exp., vol. i., pt. 2, p. 587.

1886. *Pilumnoplax heterochir*, Miers, Challenger Brachyura, p. 227, pl. 19, fig. 1, *a-d*.

Agulhas Bank, off Cape Agulhas, 274 m. depth.

1904. *P. h.*, Doflein, Valdivia Brachyura, p. 119.

Agulhas Current, at 500 m. depth; on Agulhas Bank, 155 m.; Cape of Good Hope, at 318 m.

#### GEN. LITOCHEIRA, Kinahan.

1858. *Litocheira*, Kinahan, Journ. Royal Dublin Soc., vol. i., p. 121.

1886. *L.*, Miers, Challenger Brachyura, p. 231.

1900. *Litochira*, Alcock, J. A. S. B., vol. lxix., pp. 292, 298, 313.

1904. *Litocheira*, Doflein, Valdivia Brachyura, p. 121.

#### LITOCHEIRA KINGSLEYI (Miers).

1885. *Brachygrapsus kingsleyi*, Miers, Narrative Challenger Exp., vol. i., pt. 2, p. 587.

1886. *Litocheira k.*, Miers, Challenger Brachyura, p. 232, pl. 21, fig. 1, *a-d* (*Lithocheira k.*, in explanation of plate).

"A good series of specimens (mostly females) were dredged on the Agulhas Bank, south of Cape Agulhas," lat. 35° 4' 0" S., long. 18° 37' 0" E., from 274 m. depth.

1904. *L. k.*, Doflein, Valdivia Brachyura, p. 121.

At the Cape of Good Hope, lat. 34° 33' 8" S., long. 18° 21' 2" E., from 318 m. depth.

## GEN. HEXAPUS, de Haan.

1835. *Hexapus*, de Haan, Crustacea Japonica, decas secunda, p. 35.

1900. *H.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxi., pt. 2, p. 329.

Four genera are assigned by Alcock to his sub-family Hexapodinae, namely, *Hexapus*, de Haan, *Amorphopus*, Bell, 1859, *Thaumastoplax*, Miers, 1881, and *Lambdophallus*, Alcock, 1900, each established for a single species, of which in each case only the male sex appears as yet to have been described. They all agree in the remarkable absence of the last pair of peræopods, unless a microscopic tubercle described by Bell for his *Amorphopus* can be supposed to represent a leg. Bell reproaches Fabricius and de Haan for finding "nothing special or abnormal in a Decapod having only six pairs of legs besides the claws," although Fabricius by the specific name and de Haan by the generic alike emphasise the fact, and de Haan is careful after his definition to make the further remark, "*beyond the six hinder feet, no indication of a fifth pair, nor are any hidden under the pleon.*" It is an obvious slip of the pen on Bell's part when he writes "six pairs of legs," instead of six legs or three pairs. There seems little justification for the separation either of *Amorphopus* or *Thaumastoplax* from *Hexapus*. Miers distinguishes his genus from it "by the much greater development of the second ambulatory legs and the structure of the outer maxillipedes." But he is evidently basing the first of these distinctions on a misunderstanding of the text of de Haan's work, and the second on a figure which is too small to be trusted. In 1886 Miers includes *Xenophthalmus*, White, and *Asthenognathus*, Stimpson, among the Hexapodinae, but from Stimpson's posthumous treatise it may be inferred that the former, and it is made certain that the latter, has the normal number of feet.

*Lambdophallus* is distinguished from *Hexapus* by the lambda-shaped arrangement in the anterior pair of male sexual appendages—a feature which could not have been overlooked by de Haan, had it been present in the male of *Hexapus*.

## HEXAPUS SEXPES (Fabricius).

## Plate XLI.

1798. *Cancer sexpes* (Fabricius), Suppl. Ent. Syst., p. 344.

1835. *Hexapus s.*, de Haan, Crustacea Japonica, decas secunda, pp. 35, 63, pl. 11, fig. 6 (not pl. 9, fig. 5, as stated in text). *Hexapus latipes* on pl. D.

1859. *H. s.*, Bell, Journ. Linn. Soc., vol. iii., p. 29.

1881. *H. s.*, Miers, Ann. Nat. Hist., Ser. 5, vol. viii., p. 262.

1888. *H. s.*, de Man, Arch. Naturg., vol. liii., p. 322, pl. 13, fig. 3.

1900. *H. sexpus*, Alcock, J. A. S. B., vol. lxi., p. 330.

*H. sexpes*, Stebbing, No. 7058, sent from the Cape by Dr. Péringuey, but with locality marked as doubtful. The specimen is a female, with carapace measuring 9 mm. in length by 14 mm. in breadth. The emargination of the truncate front is just perceptible. The short eyestalks, thickest at the base, are not immovable, in this respect differing from those of Alcock's *Lambdophallus sexpes*. The flagella of the slender second antennæ are 11-jointed. The characters of the mouth organs will be sufficiently seen from the figures. In the second maxillipeds the attachment of the terminal joint of the endopod to the middle of the preceding joint may be noticed. In the third maxillipeds the terminal joint is elongate, answering to de Haan's epithet *producti*, although his figure gives quite a different impression. The right cheliped is missing; the fingers of the left are not short as in de Haan's description. The other peræopods agree with de Haan's account, and also with Miers's description and figures of his *Thaumastoplax anomalipes*. De Haan states that the second [first ambulatory] legs are shorter than those which follow. Miers misunderstood him to be speaking of the second ambulatory legs or third peræopods. By its dimensions and general character, including eyes, antennæ, and other details, Miers's species would be identical with the present, were it not for the very different third maxillipeds, the figure of which is very unconvincing. The third and fourth, or the third, fourth, and fifth segments of the pleon in the males of this genus are coalesced; in the female of the species here described all seven segments are distinct, the first two the shortest, the third and fourth the broadest, the sixth and seventh the longest. The four pairs of pleopods, attached to the second, third, fourth, and fifth segments respectively, have a long, slender exopod, densely fringed with long plumose setæ, and a 6-jointed endopod, strongly geniculate between the long first joint and the much shorter second, all the joints carrying subapical tufts of long simple setæ.

#### FAMILY GRAPSIDÆ.

1900. *Grapsidæ*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxi., pt. 2, pp. 283, 288, 295, 389.

Alcock divides this family into four sub-families—Grapsinæ, Varuninæ, Sesarminæ, Plagusiinæ—which in detailed classification



I prefer to treat as distinct families (see S.A. Crustacea, pt. 4, p. 12, and pt. 3, pp. 41, 43, 46), although for greater simplicity in this Catalogue accepting the term Grapsidæ in the wider sense to embrace them all.

GEN. GRAPSUS, Lamarek.

1831. *Grapsus*, Lamarek, Syst. Anim. sans Vertèbres, p. 150.

1900. *G.*, Stebbing, S.A. Crustacea, pt. 4, p. 12.

GRAPSUS MACULATUS (Catesby).

1771. 1743 (reissue 1771) *Pagurus maculatus*, Catesby, Nat. Hist. of the Carolinas, vol. ii., p. 36, pl. 36, fig. 1. (See Miers, Challenger Brachyura, p. 255.)

1753. *Cancer grapsus*, Linn., Syst. Nat., ed. 10, p. 630.

1801. *Grapsus pictus*, Lamarek, Syst. Anim. sans Vert., p. 150.

1835. *Grapsus (Goniopsis) pictus*, de Haan, Crustacea Japonica, p. 33.

1843. *Goniopsis picta*, Krauss, Südafrik. Crust., pp. 14, 46.

Krauss describes the habits and two colour varieties of this species, which is "abundant on the limestone terraces and rocks of the Natal coast, and much sought after by the Kaffirs, who capture it by throwing pointed sticks."

1893. *Grapsus maculatus*, Stebbing, History of Crustacea, p. 93.

1900. *G. grapsus*, Alcock, J. A. S. B., vol. lxi., p. 392.

Alcock supplies an immense number of references.

GRAPSUS STRIGOSUS (Herbst).

1799. *Cancer strigosus*, Herbst, Krabben und Krebse, vol. iii., pt. 1, p. 55, pl. 47, fig. 7.

1802. *Grapsus s.*, Bosc, Hist. Nat. Crust., vol. i., p. 203.

1838. *Goniopsis strigosa*, McLeay, Annulosa of S. Africa, p. 66.

1838. *G. flavipes*, McLeay, Annulosa of S. Africa, p. 66.

1843. *G. strigosa*, Krauss, Südafrik. Crust., p. 46.

Abundant.

1900. *Grapsus strigosus*, Alcock, J. A. S. B., vol. lxi., p. 393.

1906. *G. s.*, Giard, Comptes rendus de la Soc. de Biologie, vol. lxi., p. 704.

Giard notes the discovery by E. Bordage that this crab is the host of the parasitic isopod *Kepon typus*, Duvernoy, and that its colour in life is blackish, with somewhat slate-hued reflections, the parallel transverse striæ of the carapace being

prettily lined with white dots, suggestive of the name *G. albolineatus*, employed by Lamarck.

1908. *G. s.*, Stebbing, S.A. Crustacea, pt. 4, p. 13.  
Durban.

GEN. CYCLOGRAPSPUS, Milne-Edwards.

1837. *Cyclograpsus*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 77.  
1838. *Gnathochasmus*, McLeay, Annulosa of S. Africa, p. 65.

\* CYCLOGRAPSPUS PUNCTATUS, Milne-Edwards.

1837. *Cyclograpsus punctatus*, Milne-Edwards, Hist. Nat. Crust.,  
vol. ii., p. 78.  
1838. *Gnathochasmus barbatus*, McLeay, Annulosa of S. Africa,  
p. 65, pl. 3.  
1843. *Sesarma barbata*, Krauss, Südafrik. Crust., p. 45, pl. 3, fig. 3,  
*a, b, c.*

Krauss distinguishes two varieties: "The one, figured by Macleay, lives in holes in the mud at the mouth of the Brakke River, in the district of Uitenhage, and is greenish yellow with dark red flecks on the carapace, and dark red points on the chelipeds and ambulatory feet: the other occurs under stones at Natal Point, and has on the carapace very delicate and closely aggregated dark red points, but the chelipeds and feet of uniform colour."

1847. *Gnathochasmus barbatus*, White, List Crust. Brit. Mus.,  
p. 40.  
"Female, Cape of Good Hope. Presented by Captain Carmichael."  
1907. *Cyclograpsus punctatus*, Stimpson, Smithson. Misc. Coll.,  
vol. xlix., p. 132.

Stimpson says: "Living specimens are of a purplish brown color with black punctæ. It lives among rocks and stones on sandy shores, in the third sub-region of the littoral zone. Found at Simon's Bay, Cape of Good Hope; also in the harbor of Hongkong, China."

It may be remarked that Stimpson's identification of McLeay's species with *C. punctatus*, M.-Edw., is not disallowed by his editor, Miss Rathbun, and further that neither in 1858 nor in 1907 does Stimpson mention *Sesarma barbata*, Krauss. This may be intentional, as Stimpson's own account of the living colouration does not agree with that of either variety described by Krauss.

No. 5695, two specimens sent by Dr. Péringuey, taken in Table Bay at low tide.

## GEN. PACHYGRAPSUS, Randall.

1839. *Pachygrapsus*, Randall, Journ. Ac. Sci. Philad., vol. viii., p. 126.  
1852. *Goniograpsus*, Dana, U.S. Expl. Exp., vol. xiii., pp. 332, 342.  
1858. *Pachygrapsus*, Stimpson, Proc. Ac. Sci. Philad., vol. x., p. 101.  
1900. *P.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxix., pp. 389, 399.

## PACHYGRAPSUS KRAUSSII (Dana).

1843. *Grapsus plicatus*, Krauss (not Milne-Edwards), Südafrik. Crust., p. 43, pl. 3, fig. 1.  
On the coast of Natal.  
1852. *Goniograpsus kraussii*, Dana, U.S. Expl. Exp., vol. xiii., p. 343.

## GEN. METOPOGRAPSUS, Milne-Edwards.

1853. *Metopograpsus*, Milne-Edwards, Ann. Sci. Nat., Ser. 3, vol. xx., p. 164.  
1900. *M.*, Alcock, J. A. S. B., vol. lxix., pp. 389, 396.

## METOPOGRAPSUS MESSOR (Forskål).

1775. *Cancer messor*, Forskål, Descrip. Anim. itin. Orientali, p. 88.  
1843. *Grapsus m.*, Krauss, Südafrik. Crust., p. 43.  
"On the rocks and stones at the mouth of the Umlaas River."  
1900. *Metopograpsus m.*, Alcock, J. A. S. B., vol. lxix., p. 397, with very numerous references.

## GEN. VARUNA, Milne-Edwards.

1830. *Varuna*, Milne-Edwards, Dict. Classique d'Hist. Nat., vol. xvi., p. 511.  
1905. *V.*, Stebbing, S.A. Crustacea, pt. 3, p. 41.

## \* VARUNA LITTERATA (Fabricius).

1798. *Cancer litteratus*, Fabricius, Suppl. Ent. Syst., p. 342.  
1905. *Varuna litterata*, Stebbing, S.A. Crustacea, pt. 3, p. 41.  
No. 178 sent by Dr. Gilchrist as received from the Durban Museum. Also reported from Natal by Max Weber, 1897.



## GEN. PLANES, Bowdich.

1825. *Planes*, Bowdich, Excursions in Madeira and Porto Santo, p. 15, figs. 2a, 2b.  
 1837. *Nautilograpsus*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 89.  
 1905. *Planes*, Stebbing, S.A. Crustacea, pt. 3, p. 42.

Credit for the name of this genus should, I believe, not be given to Leach, but should be shared between T. E. Bowdich and his widow, Mrs. S. Bowdich, if the signature of the plate on which the *Planes* is figured refers to the latter. Mr. Bowdich records an incident of his voyage, when two immense logs of American pine were hauled on board. These were completely water-logged, "covered with a continued mass of the *lepas anatifera*," and "also full of the *teredo navalis*." Further, "A small crab, fig. 3, a and b [on the plate 2a, 2b] which I conceive to be a new species of *planes*, was found in great numbers amongst the *anatifera*." A footnote adds: "It was of a delicate, but bright, rose colour: from the symmetrical form of its *test* (notched so regularly as to increase the projection and distinctness of its *chaperon*), it may be called *P. clypeatus*." The plate facing p. 16 is signed "*S. Bowdich del et lithog.*"

## \* PLANES MINUTUS (Linn.).

1758. *Cancer minutus*, Linn., Syst. Nat., ed. 10, vol. i., p. 625.  
 1825. *Planes clypeatus*, Bowdich, Excursions in Madeira, p. 15, figs. 2a, 2b.  
 1905. *P. minutus*, Stebbing, S.A. Crustacea, pt. 3, p. 43.

Nos. 165, 166, sent by Dr. Gilchrist from False Bay, and No. 15070 by Dr. Péringuey, specimens taken 38 miles N.W. of Table Bay.

The *Nautilograpsus major*, McLeay, Annulosa of S. Africa, p. 66, and *N. smithii*, McLeay, on the following page, are probably not distinct from *Planes minutus*, or at any rate do not seem to have been recognised by subsequent authors.

## GEN. SESARMA, Say.

1817. *Sesarma*, Say, Journ. Ac. Sci. Philad., vol. i., p. 76.  
 1905. *S.*, Stebbing, S.A. Crustacea, pt. 3, p. 44.

## SESARMA QUADRATUM (J. C. Fabricius).

1798. *Cancer quadratus*, Fabricius, Suppl. Ent. Syst., p. 341.  
 1843. *Sesarma affinis*, Krauss, Südafrik. Crust., p. 45.  
 "At Natal Point; rare."  
 1900. *S. quadratum*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxi.,  
 pt. 2, pp. 411, 413, with synonymy and many references.

## SESARMA PICTUM (de Haan).

1835. *Grapsus (Pachysoma) pictus*, de Haan, Crustacea Japonica,  
 p. 61, pl. 16, fig. 6.  
 1843. *Sesarma picta*, Krauss, Südafrik. Crust., p. 45.  
 "It lives in swarms in the mud of Natal Bay, and runs very  
 swiftly."  
 1900. *S. pictum*, Alcock, J. A. S. B., vol. lxi., pp. 411, 414.

## SESARMA TETRAGONUM (J. C. Fabricius).

1798. *Cancer tetragonus*, Fabricius, Suppl. Ent. Syst., p. 341.  
 1799. *C. fascicularis*, Herbst, Krabben und Krebse, vol. iii., pt. 1,  
 p. 49, pl. 47, fig. 5.  
 1843. *Sesarma tetragona*, Krauss, Südafrik. Crust., p. 44.

According to Krauss, "The carapace is dark violet, with margins sealing-wax red; the chelipeds are beautifully coloured of the same hue. It is found on the shores of Natal Bay, where it burrows in such places as are not put under water at the spring tides. Breadth, 1 inch 6 lines; length, 1 inch 4 lines." Krauss includes in his synonymy only Herbst's species and the *Sesarma tetragona* of Milne-Edwards, 1837. The latter was distinguished from *Cancer tetragonus*, Fabricius, by de Man in 1887 under the name *Sesarma meinerti*. With this Ortmann in 1894 and Doflein in 1904 identify the species found by Krauss in Natal Bay. Alcock in 1900 describes both *S. meinerti* and *S. tetragonum*, without giving a reference to Krauss under either name, but identifying Herbst's *C. fascicularis* with *C. tetragonus* of Fabricius.

## SESARMA RETICULATUM, Say.

1817. *Sesarma reticulata*, Say, Trans. Ac. Sci. Philad., vol. i., p. 73,  
 pl. 4, fig. 5.  
 1838. *S. r.*, McLeay, Annulosa of S. Africa, p. 65.  
 McLeay identifies his Cape specimen with *Grapsus cinereus*,

Bosc, 1802, and yet gives t Say's specific name, which is dated 1817. Miss Rathbun, Proc. Biol. Soc. Washington, vol. xi., 1897, distinguishes Say's species on p. 89 under a different sub-genus from that to which she assigns Bosc's species on p. 90. It leaves a vagueness about McLeay's species, since he refers both to Bosc and Say.

1843. *S. r.*, Krauss, Südafrik. Crust., p. 45.

Krauss gives no independent information.

SESARMA LONGIPES, Krauss.

1843. *Sesarma longipes*, Krauss, Südafrik. Crust., p. 44, pl. 3, fig. 2.  
 "Caught under stones at the mouth of the Umlaas River.  
 It is very nimble in its movements."  
 1888. *Helice* (?) *l.*, Miers, Challenger Brachyura, p. 268.  
 Miers suggests that the Umlaas River in Krauss stands for Umlazi.  
 1900. *Sesarma l.*, Alcock, J. A. S. B., vol. lxix., pp. 413, 424.

\* SESARMA CATENATUM, Ortmann.

1897. *Sesarma catenata*, Ortmann, Zool. Jahrb., vol. x., p. 334,  
 pl. 17, fig. 9.  
 1905. *S. catenatum*, Stebbing, S.A. Crustacea, pt. 3, p. 44.  
 Nos. 3, 3A sent by Dr. Gilchrist from Kaerbooms River,  
 Plettenberg Bay. A specimen was also sent me from the  
 Durban Museum.

SESARMA EULIMENE, de Man.

1897. *Sesarma eulimene*, de Man, in Weber's Fauna von Süd-Afrika,  
 Zool. Jahrb., vol. x., p. 157, pl. 15, fig. 1.  
 Umbilo River, Natal.

GEN. PLAGUSIA, Latreille.

1806. *Plagusia*, Latreille, Genera Crustaceorum et Insectorum,  
 vol. i., p. 33.  
 1900. *P.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxix., pp. 297, 436.  
 1905. *P.*, Stebbing, S.A. Crustacea, pt. 3, p. 46.

\* PLAGUSIA CHABRUS (Linn.).

1758. *Cancer chabrus*, Linn., Systema Naturæ, ed. 10, p. 628.  
 1835. *P. capensis*, de Haan, Crustacea Japonica, decas secunda,  
 pp. 31, 58.



From the Cape of Good Hope, by Dr. Horstock [or Horstok].

1837. *P. tomentosa*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 92.

"Inhabits the Cape of Good Hope and Chili."

1838. *P. t.*, McLeay, Annulosa of S. Africa, p. 66.

1843. *P. t.*, Krauss, Südafrik. Crust., p. 42, pl. 2, fig. 6.

"In the holes excavated by the surf on the rocky coast of Table Bay."

1847. *P. chabrus*, White, List Crust. Brit. Mus., p. 42.

"Male, Cape of Good Hope. Presented by Captain Carmichael. Male and female, S. Africa. Presented by Dr. Andrew Smith."

1905. *P. capensis*, Stebbing, S.A. Crustacea, pt. 3, p. 47.

No. 195, specimens sent by Dr. Gilchrist from East London (shore) and from Three Anchor Bay.

1907. *P. chabrus*, Rathbun, Smithson. Misc. Coll., vol. xlix., p. 122, correction in footnote of Stimpson's *P. tomentosa*.

Stimpson says: "White refers this species, perhaps justly, to the *Cancer chabrus* of Linnæus. But the identification does not appear to rest upon comparison of the original specimens, and until this is made we prefer to use a name to which we can refer with certainty. It is rather common about the rocks at half-tide in Simon's Bay, Cape of Good Hope."

Though now accepting the name *P. chabrus*, in deference to better authority than my own, I may refer to the arguments I have previously used in favour of *P. capensis*, which is of older date than *P. tomentosa*.

#### PLAGUSIA SQUAMOSA (Herbst).

1790. *Cancer squamosus*, Herbst, Krabben und Krebse, vol. i., pt. 8, p. 260, pl. 20, fig. 113.

1843. *Plagusia squamosa*, Krauss, Südafrik. Crust., p. 42.

"On the surf-lashed rocks of the Natal coast near the mouth of the Umlaas River."

1900. *P. depressa* var. *squamosa*, Alcock, J. A. S. B., vol. lxix., p. 437.

1907. *P. depressa* (Fabricius), Rathbun, Smithson. Misc. Coll., vol. xlix., p. 112, footnote correction to Stimpson's "*Plagusia squamosa* (Herbst) Dana."

## GEN. PERCNON, Gistel.

1835. *Acanthopus*, de Haan, preocc. Crustacea Japonica, decas secunda, p. 29.  
 1848. *Percnon*, Gistel, Naturgeschichte des Thierreichs, Stuttgart, p. viii.  
 1876. *Leiolophus*, Miers, Catal. Crust., New Zealand, p. 46.  
 1900. *Liolophus*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxix., pp. 297, 439.  
 1900. *Percnon*, Rathbun, Proc. U.S. Nat. Mus., vol. xxii., p. 281.

From this paper by Miss Rathbun, on "The Decapod Crustaceans of West Africa," the reference to Gistel is adopted.

## PERCNON PLANISSIMUM (Herbst).

1804. *Cancer planissimus*, Herbst, Krabben und Krebse, vol. iii., pt. 4, p. 3, pl. 59, fig. 3.  
 1806. *Plagusia clavimana*, Latreille, Gen. Crust. et Ins., vol. i., p. 34.  
 1835. *Ocypode (Acanthopus) c.*, de Haan, Crustacea Japonica, decas secunda, p. 30.  
 1838. *Plagusia spinosa*, McLeay, Annulosa of S. Africa, p. 66.  
 1843. *Acanthopus clavimanus*, Krauss, Südafrik. Crust., p. 42.  
 "Under stones and rocks at Natal Point and in Table Bay ; tolerably common."  
 1896. *Leiolophus planissimus*, Miers, Catal. Crust. N. Zealand, p. 46.  
 1900. *Liolophus p.*, Alcock, J. A. S. B., vol. lxix., p. 439, with numerous references.  
 1907. *Percnon planissimum*, Rathbun, Smithson. Misc. Coll., vol. xlix., p. 123, footnote correction to Stimpson's "*Acanthopus planissimus* (Herbst) Dana."

## FAMILY GECARCINIDÆ.

1852. *Gecarcinidæ*, Dana, U.S. Expl. Exp., vol. xiii., p. 374.  
 1900. *Geocarcinidæ*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxix., pp. 283, 297, 440.  
 1901. *Gecarcinidæ*, Rathbun, Bull. U.S. Fish Comm. for 1900, vol. ii., p. 13.  
 1908. *G.*, Stebbing, S.A. Crustacea, pt. 4, p. 14.

## GEN. GECARCINUS, Leach.

1814. *Gecarcinus*, Leach, Edinb. Encycl., vol. vii., p. 430.  
 1837. *G.*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 25.  
 1888. *Geocarcinus*, Miers, Challenger Brachyura, vol. xvii., p. 217.

GEARCINUS LAGOSTOMA, Milne-Edwards.

1837. *Gecarcinus lagostoma*, Milne-Edwards, Hist. Nat. Crust. vol. ii., p. 27.  
 1886. *Geocarcinus l.* (?), Miers, Challenger Brachyura, vol. xvii., p. 218, pl. 18, fig. 2.

Miers says that this species has apparently a very extensive range, including the Cape of Good Hope. From a footnote on p. 219 it appears that the authority for this locality depends on a specimen in the British Museum "designated as from the Cape of Good Hope." Dr. Calman, Proc. Zool. Soc., London, 1909, p. 710, incidentally remarks that the history of this specimen cannot be traced.

GEN. CARDISOMA, Latreille.

1825. *Cardisoma*, Latreille, Encycl. Méth., vol. x., p. 685.  
 1900. *Cardiosoma*, Alcock, J. A. S. B., vol. lxix., pp. 297, 441, 444.  
 1908. *Cardisoma*, Stebbing, S.A. Crustacea, pt. 4, p. 14.

CARDISOMA CARNIFEX (Herbst).

1796. *Cancer carnifex*, Herbst, Krabben und Krebse, vol. ii., pt. 6, p. 163, pl. 41, fig. 1.  
 1908. *Cardisoma c.*, Stebbing, S.A. Crustacea, pt. 4, p. 14.  
 Specimen from Durban Museum, sent by Mr. J. F. Quekett.

FAMILY OCYPODIDÆ.

1894. *Ocypodidæ*, Ortmann, Zool. Jahrb., vol. vii., pp. 700, 741.  
 1900. *O.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxix., pt. 2, pp. 283, 290, 294, 342.  
 1905. *O.*, Stebbing, S.A. Crustacea, pt. 3, p. 39.

GEN. OCYPODE, Fabricius.

1798. *Ocypode*, J. C. Fabricius, Suppl. Ent. Syst., p. 347.  
 1803. *Ocypode*, Latreille, Hist. Nat. Crust. et Ins., vol. vi., pp. 27, 35.

On p. 27 *Ocypoda*, though an obvious misprint, has been accepted by many authors as the original name of the genus, with Fabricius quoted as the authority for it. Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 41, adopts *Ocypoda*, though citing Fabricius and Latreille's p. 27 for *Ocypode*.

## OCYPODE CURSOR (Linn.).

1758. *Cancer cursor*, Linn., Systema Naturæ, ed. 10, p. 625.  
 1804. *Ocypode ippeus*, Olivier, Voy. dans l'empire ottoman, vol. ii., p. 234, pl. 30, fig. 1.

The reference is borrowed from Milne-Edwards, the date from Doflein, who gives the page as 235, and, like Miers, gives the name as *Ocypoda*.

1904. *Ocypoda cursor*, Doflein, Valdivia Brachyura, p. 127.  
 A female specimen, from Tiger Peninsula, in Great Fish Bay. Dr. Péringuey tells me that he reckons South Africa to include Africa south of lat. 16° S. This will bring Dr. Doflein's specimen within the limit, but the specimens included in this Catalogue have not as a rule been taken nearly so far north ward.  
 1907. *Ocypode ippeus*, Rathbun, Smithson. Misc. Coll., vol. xlix., p. 108, footnote correction of Stimpson's "*Ocypode cursor* (Belon) de Haan," which includes in the synonymy Olivier's *Ocypode ippeus*.

## OCYPODE CERATOPHTHALMUS (Pallas).

1772. *Cancer ceratophthalmus*, Pallas, Spicilegia Zoologica, Fasciculus nonus, p. 83, pl. 5, figs. 7, 8.  
 1798. *Ocypode ceratophthalma*, Fabricius, Suppl. Ent. Syst., p. 347.  
 1838. *Ceratophthalma cursor* (Herbst), McLeay, Annulosa of S. Africa, p. 64.  
 1843. *Ocypode ceratophthalma*, Krauss, Südafrik. Crust., p. 41.  
 "On the sandy parts of the Natal coast; younger individuals I have also found on extensive sandy coasts of the Colony."

## OCYPODE CORDIMANA, Desmarest.

1825. *Ocypode cordimana*, Desmarest, Consid. gén. Crust., p. 121.  
 1838. *O. c.*, McLeay, Annulosa of S. Africa, p. 64.  
 McLeay remarks that "the *Ocypode cordimana* of Dehaan appears to be a very different species." Krauss thinks that it is "probably only a younger individual." But Ortmann in 1897 and Doflein in 1904 make de Haan's *O. cordimana* a synonym of *O. ceratophthalma*.  
 1843. *O. c.*, Krauss, Südafrik. Crust., p. 41.  
 On the sandy coast of Natal.



OCYPODE KUHLII, de Haan.

1835. *Ocypode kuhlii*, de Haan, Crustacea Japonica, decas secunda, pp. 29, 58.  
 1880. *O. ryderi*, Kingsley, Pr. Ac. Sci. Philad., p. 183 (*fide* Ortmann), from Natal.  
 1897. *Ocypoda kuhli*, Ortmann, Zool. Jahrb., vol. x., p. 364.  
 From Cape land : Port Elizabeth.

GEN. UCA, Leach.

1814. *Uca*, Leach, Edinb. Encycl., vol. vii., p. 430.  
 1905. *Uca*, Stebbing, S.A. Crustacea, pt. 3, p. 39, where the necessary synonymy is given and discussed.

UCA ARCUATA (de Haan)

1835. *Ocypode (Gelasimus) arcuata*, de Haan, Crustacea Japonica, decas secunda, pp. 26, 53, pl. 7, fig. 2.  
 1843. *Gelasimus arcuatus*, Krauss, Südafrik. Crust., p. 14, 39.  
 1891. *G. a.*, de Man, Notes from the Leyden Museum, vol. xiii., p. 28, pl. 3, fig. 7.  
 1905. *Uca arcuata*, Stebbing, S.A. Crustacea, pt. 3, p. 40.  
 Specimen from Durban Museum, sent by Mr. J. F. Quekett.

UCA LACTEA (de Haan).

1835. *Ocypode (Gelasimus) lactea*, de Haan, Crustacea Japonica, decas secunda, pp. 26, 54, pl. 15, fig. 5.  
 1843. *Gelasimus lacteus*, Krauss, Südafrik. Crust., p. 39.  
 Of this species and the preceding Krauss says: "They both dig themselves deep holes in the mud among the *Rhizophora* roots, and live in swarms. They run rapidly and are very shy."  
 1897. *Uca lactea*, Ortmann, Zool. Jahrb., vol. x., p. 355.  
 1900. *Gelasimus lacteus*, Alcock, J. A. S. B., vol. lxix., p. 355.

UCA CHLOROPHTHALMUS (Milne-Edwards).

1837. *Gelasimus chlorophthalmus*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 54. *G. chlorophthalmus*, Guérin, Iconogr. Règne Animal, pl. 4, fig. 3.  
 This plate is probably of earlier date than 1837, but it is undated.  
 1838. *G. chlorophthalmus*, M<sup>c</sup>Leay, Annulosa of S. Africa, p. 64.

1843. *G. c.*, Krauss, Südafrik. Crust., p. 40.

Krauss says: "I do not know this species; but to judge by Guérin's figure it appears to stand very near the preceding species."

1891. *G. c.*, de Man., Notes from the Leyden Museum, vol. xiii., p. 41.

1907. *G. c.* (?), Ortmann, Zool. Jahrb., vol. x., p. 354.

Ortmann argues that any identification of this species is so doubtful that its title should be rejected as *nomen nudum*. Certainly McLeay and Krauss give no help towards guaranteeing its claim to be a South African species.

#### UCA INVERSA (Hoffmann).

1874. *Gelasimus inversus*, Hoffmann, Crust. & Echinod. Madagasc., p. 19, pl. 4, figs. 23-26.

1880. *G. smithi*, Kingsley, Pr. Ac. Sci. Philad., p. 144, pl. 9, fig. 14. From Natal.

1891. *G. inversus*, de Man, Notes from the Leyden Museum, vol. xiii., p. 44, pl. 4, fig. 12.

1897. *Uca inversa*, Ortmann, Zool. Jahrb., vol. x., p. 351.

De Man and Ortmann agree that the species named *Gelasimus chlorophthalmus* by Hilgendorf (in 1869 and 1878) is not the species so named by Milne-Edwards, but is identical with Hoffmann's *Uca inversa*.

#### GEN. CLEISTOSTOMA, de Haan.

1835. *Cleistostoma*, de Haan, Crustacea Japonica, decas secunda, p. 26.

1837. *Cleistotoma*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 67.

1838. *C.*, McLeay, Annulosa of S. Africa, p. 64.

1843. *C.*, Krauss, Südafrik. Crust., p. 40.

1900. *Cleistostoma*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxix., pp. 294, 372.

#### CLEISTOSTOMA EDWARDSII (McLeay).

1838. *Cleistotoma edwardsii*, McLeay, Annulosa of S. Africa, p. 64.

McLeay says: "This species comes very near to the *Cleistotoma Leachii* of Milne-Edwards, but differs from it in the surface being altogether smooth. The length is four lines."

1843. *C. e.*, Krauss, Südafrik. Crust., p. 40.

Krauss supplies no additional information, and I do not

know whether McLeay's species has been since recognised. *C. leachii* was first named *Macrophthalmus l.* by Audouin, Deser. Crust. Égypte, pl. 2, fig. 1 (Savigny).

GEN. EUPLAX, Milne-Edwards.

1852. *Euplax*, Milne-Edwards, Ann. Sci. Nat. Zool., Ser. 3, vol. xviii., p. 160.  
 1858. *Chænostoma*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 97.  
 1886. *Euplax*, Miers, Challenger Brachyura, vol. xvii., pt. 49, p. 251.

EUPLAX BOSCH (Audouin).

1825. *Macrophthalmus boschii*, Audouin, Deser. Crust. Égypte, pl. 2, fig. 2 (Savigny).  
 1843. *M. b.*, Krauss, Südafrik. Crust., p. 40, pl. 2, fig. 5.  
 "On the coast of Natal."  
 1852. *Cleistostoma b.* (?), Dana, U.S. Expl. Exp., vol. xiii., p. 313, pl. 19, fig. 3, *a-d*.  
 1852. *Euplax boschi*, Milne-Edwards, Ann. Sci. Nat. Zool., Ser. 3, vol. xviii., p. 160.  
 1858. *Chænostoma orientale*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 97.  
 1886. *Euplax* (*Chænostoma*) *boschii*, Miers, Challenger Brachyura, Reports, vol. xvii., pt. 49, p. 252.  
 1907. *Euplax b.*, Rathbun, Smithsonian. Misc. Coll., vol. xlix., p. 98, footnote correction of Stimpson's *Chænostoma orientale*.

GEN. DOTILLA, Stimpson.

1858. *Dotilla*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 98.

DOTILLA FENESTRATA, Hilgendorf.

1843. *Doto sulcatus*, Krauss. (not *Cancer sulcatus*, Forskål, 1775), Südafrik. Crust., p. 39.  
 Krauss says: "This sand-crab lives in tolerably deep holes on the sandy coast of Natal. During the ebb it is seen busily occupied in clearing its hole, which the flood-tide had deluged, by shovelling out the sand with its feet. It is frequent."  
 1869. *Dotilla fenestrata*, Hilgendorf, van der Decken's Reisen in Ost-Afrika, vol. iii., p. 85, pl. 3, fig. 5.  
 1884. *D. f.*, Miers, "Alert" Crustacea, p. 543.

Miers says: "Hitherto it has apparently been recorded only

from the East Coast of Africa, where it ranges from Ibo to Natal, if (as Hilgendorf notes, and as is doubtless correct) the specimens referred by Krauss to *D. sulcata* belong to *D. fenestrata*."

1894. *D. f.*, Ortmann, Zool. Jahrb., vol. vii., p. 748.

Two male specimens from the Cape of Good Hope in the Strassburg Museum.

### FAMILY PINNOTHERIDÆ.

1833. *Pinnotheridea* (part), de Haan, Crustacea Japonica, decas prima, p. 5.

1852. *Pinnotheridæ* (part), Dana, U.S. Expl. Exp., vol. xiii., p. 378.

1890. *Pinnoteridæ*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxix., pp. 284, 293, 331.

Alcock hesitatingly divides this family into four sub-families, which he names Pinnoterinae, Pinnotherelinae, Xenophthalminae, Asthenognathinae.

### GEN. PINNOTHERES, Bosc.

1802. *Pinnotheres* (part), Bosc, Hist. Nat. Crust., vol. i., p. 239.

1803. *P.* (restricted), Latreille, Hist. Nat. Crust. et Ins., vol. vi., p. 78.

1852. *Pinnothera*, Dana, U.S. Expl. Exp., vol. xiii., p. 378.

1893. *Pinnotheres*, Stebbing, History of Crustacea, p. 99.

1900. *Pinnoteres*, Alcock, J. A. S. B., vol. lxix., pp. 294, 337.

### PINNOTHERES sp., Doflein.

1904. *Pinnotheres* sp., Doflein, Valdivia Brachyura, p. 124, pl. 37, figs. 3, 4, text fig. 10.

A female specimen taken in Algoa Bay.

### GEN. OSTRACOTHERES, Milne-Edwards.

1853. *Ostracotheres*, Milne-Edwards, Ann. Sci. Nat., Ser. 3, vol. xx., p. 219.

1875. *O.*, Paulson, Red Sea Crustacea, p. 70.

1894. *O.*, Ortmann, Zool. Jahrb., vol. vii., p. 692.

1900. *Ostracoteres*, Alcock, J. A. S. B., vol. lxix., p. 293.

1907. *O.*, Nobili, Ann. Sci. Nat., Ser. 9, vol. iv., p. 299.



## OSTRACOTHERES TRIDACNÆ (Rüppell).

1830. *Pinnotheres tridacnæ*, Rüppell, Red Sea Crabs, p. 22, pl. 5, fig. 2, pl. 6, fig. 17.  
 1843. *P. t.*, Krauss, Südafrik. Crust., p. 47.  
 "On the coast of Natal."  
 1853. *Ostracotheres t.*, Milne-Edwards, Ann. Sci. Nat., Ser. 3, vol. xx. p. 219.  
 1875. *O. t.*, Paulson, Red Sea Crustacea, p. 70.  
 1907. *Ostracoteres t.*, Nobili, Ann. Sci. Nat., Ser. 9, vol. iv., p. 299.

## FAMILY HYMENOSOMATIDÆ.

1858. *Hymenosomidæ*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 108.  
 1900. *H.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxi., pp. 285, 291, 295, 385.  
 1905. *Hymenosomatidæ*, Stebbing, S.A. Crustacea, pt. 3, p. 49.

It may be noted that Miers in 1886 classes the Hymenosominae as a sub-family of the Pinnotheridæ, thus, like Alcock, assigning them to the Catometopa. Doflein in 1904 arranges the Hymenosomidæ and Parthenopidæ as families of the Cyclometopa. Borradaile in 1907 and Calman in 1909 place both these families among the Oxyrrhyncha, as Ortmann had earlier done with the Hymenosomidæ.

## GEN. HYMENOSOMA, Desmarest.

1825. *Hymenosoma*, Desmarest, Consid. gén. Crust., p. 163.  
 1905. *H.*, Stebbing, S.A. Crustacea, pt. 3, p. 49.  
 1909. *H.*, Chilton, Subantarctic Islands of New Zealand, p. 610.

## HYMENOSOMA ORBICULARE, Desmarest.

1825. *Hymenosoma orbiculare*, Desmarest, Consid. gén. Crust., p. 163, pl. 26, fig. 6, *a-e*.  
 "From the Cape of Good Hope."  
 1838. (*Hymenosoma*) *Leachium o.*, McLeay, Annul. of S. Africa, p. 68.  
 1843. *Hymenosoma o.*, Krauss, Südafrik. Crust., p. 51.  
 "The colour is brownish yellow. Tolerably frequent in Table Bay, under stones and in holes."  
 1858. *H. o.*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 108.  
 1886. *H. o.*, Miers, Challenger Brachyura, Reports, vol. xvii., p. 280.  
 "Numerous specimens were collected in Simon's Bay, South Africa, in 5 to 20 fathoms (mostly of small size)."

1904. *H. o.*, Doflein, Valdivia Brachyura, p. 88.

Eight males and females in Francis Bay; two males off Cape Agulhas in a depth of 80 m.; seven males and females in Algoa Bay.

1907. *H. o.*, Stimpson, Smithson. Misc. Coll., vol. xlix., p. 144.

"Found at the Cape of Good Hope, in False Bay, on sandy bottoms, in ten fathoms." Stimpson also remarks that "the published figures of this species must in many respects be imperfect, as they show great discrepancies."

\* HYMENOSOMA GEOMETRICUM, Stimpson.

1858. *Hymenosoma geometricum*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 108.

1886. *H. g.*, Miers, Challenger Brachyura, p. 280.

Miers only expresses the opinion that this is possibly not distinct from *H. orbiculare*, with which Doflein in 1904 unites it, as a possible variety.

1905. *H. g.*, Stebbing, S.A. Crustacea, pt. 3, p. 50.

No. 69, specimens sent by Dr. Gilchrist were taken in False Bay, Roman Rock, N.W.  $\frac{3}{4}$  N.,  $\frac{3}{4}$  mile; depth 33 m. This species has also been sent me by C. F. Beyers, Esq., taken at low tide in False Bay.

1907. *H. g.*, Stimpson, Smithson. Misc. Coll., vol. xlix., p. 144.

Stimpson says: "The only specimen before us is a male," and, after describing it, writes as follows: "This species is certainly distinct from *H. orbiculare*, if the published figures and descriptions of that species are to be relied upon. Besides less important characters, the sharp lateral teeth on the hepatic region and the slenderness of the ischium-joint of the outer maxillipeds will be sufficient to distinguish it. Unfortunately we have no specimens of the true *H. orbiculare* upon which to found a comparison, as the examples which were taken at the Cape, and identified with that species at the time, were all lost by accident. Our specimen was dredged from a sandy bottom in twelve fathoms, in Simon's Bay, Cape of Good Hope."

GEN. ELAMENA, Milne-Edwards.

1837. *Elamena*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 33.

1900. *E.*, Alcock, J. A. S. B., vol. lxix., p. 385.

## ELAMENA MATHÆI (Desmarest).

1825. *Hymenosoma mathæi*, Desmarest, Consid. gén. Crust., p. 163.  
 1830. *H. mathæi*, Rüppell, Red Sea Crabs, p. 21, pl. 5, fig. 1, pl. 6, fig. 16.  
 1837. *Elamena mathæi*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 35.  
 1843. *E. m.*, Krauss, Südafrik. Crust., p. 51.  
 "On the weed-covered coasts of Natal. Colour yellowish."  
 1875. *E. m.*, Paulson, Red Sea Crustacea, p. 71, pl. 9, fig. 3, *a, b*.

## TRIBE OXYSTOMATA.

1841. *Oxystomata*, de Haan, Crustacea Japonica, decas quinta, p. 111.  
 1896. *Oxystoma*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxx., pt. 2, p. 135.  
 1900. *Oxystomata*, Stebbing, S.A. Crustacea, pt. 1, p. 21; 1902, *ibid.*, pt. 2, p. 16; 1905, *ibid.*, pt. 3, p. 52; 1908, *ibid.*, pt. 4, p. 15.

## FAMILY CALAPPIDÆ.

1852. *Calappidæ*, Dana, U.S. Expl. Exp., vol. xiii., pp. 390, 393.  
 1896. *C.*, Alcock, J. A. S. B., vol. lxx., p. 137.  
 1900. *C.*, Stebbing, S.A. Crustacea, pt. 1, p. 21, and 1908; *ibid.*, pt. 4, p. 17.

## GEN. CALAPPA, J. C. Fabricius.

1798. *Calappa*, Fabricius, Suppl. Ent. Syst., p. 345.  
 1908. *C.*, Stebbing, S.A. Crustacea, pt. 4, p. 17.

## CALAPPA HEPATICA (Linn.).

1758. *Cancer hepaticus*, Linn., Systema Naturæ, ed. 10, p. 630.  
 1843. *Calappa tuberculata*, Krauss, Südafrik. Crust., p. 52.  
 In little pits on the sandbanks of the Bay of Natal.  
 1908. *C. hepatica*, Stebbing, S.A. Crustacea, pt. 4, p. 17.  
 Durban Museum.

## CALAPPA FLAMMEA (Herbst).

1794. ? *Cancer flammeus*, Herbst, Krabben und Krebse, vol. ii., pt. 5, p. 161, pl. 40, fig. 2; and 1803, *ibid.*, vol. iii., pt. 3, p. 19.

1886. *Calappa flammea*, Miers, Challenger Brachyura, vol. xvii., Rep. 49, p. 284, pl. 23, fig. 1.

"An adult male labelled as from Simon's Bay, Cape of Good Hope, 10 to 20 fathoms." In a footnote Miers mentions the possibility that Herbst's species, originally described from the East Indies, is not identical with this South African form.

1901. *C. f.*, Rathbun, Bull. U.S. Fish Comm. for 1900, vol. ii., p. 84, pl. 2.

CALAPPA MONIZIANA, de Brito Capello.

1871. *Calappa moniziana*, de Brito Capello, Journ. Sci. Lisboa, vol. iii., pp. 129, 133, pl. 2, figs. 1, 16.

Under this name de Brito Capello gives the locality, "Patria: cabo de Boa Esperanza?" for an individual in a box of insects, arachnids and crustaceans presented to the [Lisbon] Museum by Dr. Moniz. On p. 133 he draws up a synoptic table of eight species of *Calappa*, three of these having in common the characters, "Clypeiform prolongations very salient. Teeth developed at the hind margin of the carapace. At the middle of the same margin a great space without teeth." The three are distinguished one from another as follows: *C. moniziana* having on the lower margin of the hand a tubercle only, *C. marmorata* a large tooth, and *C. gallus* neither tooth nor tubercle.

From Cape of Good Hope. See Miers, Challenger Brachyura, p. 284.

GEN. MURSIA, Desmarest.

1825. *Mursia*, Desmarest, Consid. én. Crust., p. 108 footnote.  
1900. *M.*, Stebbing, S.A. Crustacea, pt. 1, p. 21.

\* MURSIA CRISTIMANUS, de Haan.

1837. *Mursia cristimanus*, de Haan, Crustacea Japonica, decas tertia p. 70.

1839. *M. cristimana*, de Haan, Crust. Jap., decas quarta, p. 73.

Brought to the Dutch Museum from the Cape of Good Hope by Dr. Horstok.

1843. *M. c.*, Krauss, Südafrik. Crust., p. 52.

Krauss gives Dr. v. Lichtenstein's authority for the existence of another specimen from the Cape in the zoological museum at Berlin.



1900. *M. cristimanus*, Stebbing, S.A. Crustacea, pt. 1, p. 22.  
No. 5, from False Bay, found in trawl; No. 47, male obtained S.E. of East London, from 58 m.; No. 48, female obtained near Port Elizabeth, from 67 m.; all sent by Dr. Gilchrist.
1904. *M. cristimana*, Doflein, Valdivia Brachyura, p. 38, pl. 16, figs. 5-12; pl. 18, fig. 1.  
Taken off Cape Town, at 178 m.; Cape Agulhas, at 80 m.; in Francis Bay; off the Cape of Good Hope, at 318 m.; and in Simon's Bay, at 70 m. depth.

## FAMILY MATUTIDÆ.

1838. *Matutidæ*, M<sup>c</sup>Leay, Annulosa of S. Africa, p. 70.
1905. *M.*, Stebbing, S.A. Crustacea, pt. 3, p. 53.

## GEN. MATUTA, J. C. Fabricius.

1798. *Matuta*, Fabricius, Suppl. Ent. Syst., p. 369.
1905. *M.*, Stebbing, S.A. Crustacea, p. 53.

## MATUTA LUNARIS (Forskål).

1775. *Cancer lunaris* Forskål, Descr. Anim. in itin. Orientali, p. 91.
1838. (*Matutinus*) *Matuta victor*, M<sup>c</sup>Leay, Annulosa of S. Africa, p. 70.
1843. *Matuta victor*, Krauss, Südafrik. Crust., p. 52.  
Krauss says: "I have several times taken it while fishing with the net in Natal Bay and at ebb-tide on the surf-beaten sandbanks at the mouth of the Umlaas."
1852. *M. lunaris*, Dana, U.S. Expl. Exp., vol. xiii., p. 395  
Cape of Good Hope.
1905. *M. l.*, Stebbing, S.A. Crustacea, pt. 3, p. 54.  
Nos. 177, 178, from the Durban Museum.

## FAMILY LEUCOSIIDÆ.

1819. *Leucosiadæ*, Leach, The Entomologist's Useful Compendium, p. 91.
1852. *Leucosidæ*, Dana, U.S. Expl. Exp., vol. xiii., pp. 390, 391, 396.
1886. *Leucosiidæ*, Miers, Challenger Brachyura, vol. xvii., Rep. 49, p. 297.
1896. *L.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxx., pp. 136, 164, 166.

## GEN. PHILYRA, Leach.

1817. *Philyra*, Leach, Zool. Miscell., vol. iii., p. 18.

1902. *P.*, Stebbing, S.A. Crustacea, pt. 2, p. 17.

## \* PHILYRA PUNCTATA, Bell.

1855. *Philyra punctata*, Bell, Trans. Linn. Soc., vol. xxi., p. 301,  
pl. 33, fig. 2.

Bell says: "It was dredged in Simon's Bay, South Africa, in sand, at the depth of from four to seven fathoms."

1902. *P. p.*, Stebbing, S.A. Crustacea, pt. 2, p. 17.

No. 24, a specimen sent by Dr. Gilchrist, from Mossel Bay.

1904. *P. p.*, Doflein, Valdivia Brachyura, p. 45, pl. 15, figs. 1-4.

From Francis Bay, Algoa Bay, and Plettenberg Bay, all in small depths.

## GEN. PERSEPHONA, Leach.

1817. *Persephona*, Leach, Zool. Miscell., vol. iii., pp. 18, 22.

1886. *P.*, Miers, Challenger Brachyura, vol. xvii., Rep. 49, p. 311.

1901. *P.*, Rathbun, Bull. U.S. Fish. Comm. for 1900, vol. ii., p. 86.

1902. *P.*, Rathbun, Proc. U.S. Nat. Mus., vol. xxvi., p. 30.

Miss Rathbun here remarks: "I think that the genus *Myra*, Leach, is not distinct from *Persephona*, Leach." *Persephona* has page precedence.

## PERSEPHONA PUNCTATA (Linn.).

1758. *Cancer punctatus* (part), Linn., Systema Naturæ, ed. 10, p. 630.

1886. *Persephona punctata*, Miers, Challenger Brachyura, vol. xvii., Rep. 49, p. 312, pl. 25, fig. 5.

Speaking of *Persephona*, Miers says: "This genus apparently represents *Myra* on the shores of the American continent and islands adjacent," adding in a footnote: "Its range may, however, extend over the whole Atlantic region, since there is a specimen, perhaps not distinct from *Persephona punctata*, from South Africa (Sir A. Smith), in the collection of the British (Natural History) Museum."

## PERSEPHONA CUPHÆUS (Linn.).

1758. *Cancer cephæus*, Linn., Systema Naturæ, ed. 10, p. 628.

1788. *C. c.*, Herbst, Krabben und Krebse, vol. i., pt. 7, p. 213.

Herbst says: "Its habitat is in India and at the Cape of

Good Hope." It seems quite uncertain whether this should be identified with the species named *Leucosia fugax* by Fabricius in 1798, *Myra fugax* by Leach in 1817, and *Persephona fugax* by Miss Rathbun in 1907.

#### GEN. EBALIA, Leach.

1817. *Ebalia*, Leach, Malacostraca Podophthalmata Britanniae, text to pl. 25 (published April 1, 1817), and Zool. Misc., vol. iii., p. 18.  
 1896. *E.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxx., pp. 166, 170, 185.

#### EBALIA TUBERCULOSA (A. Milne-Edwards).

1873. *Persephona tuberculosa*, M.-Edw., Journ. Mus. Godeffroy, vo i., pt. 4, p. 86.  
 1886. *Ebalia t.*, Miers, Challenger Brachyura, vol. xvii., Rep. 49, p. 306, pl. 25, fig. 1.

Miers says: "There are in the collection three small females from the Agulhas Bank, 150 fathoms, lat 35° 4' 0" S., long. 18° 37' 0" E. (Station 142), which cannot, I think, be distinguished specifically from *Ebalia tuberculosa*."

#### \* EBALIA TUBEROSA (Pennant)? var.

1778. *Cancer tuberosus*, Pennant, Brit. Zool., vol. iv., p. 8, pl. 9A, fig. 19.  
 1817. *E. pennantii*, Leach, Malac. Pod. Brit., pl. 25, figs. 1-6.

No. 10763, from False Bay, off Cape Point, sent me by Dr. Péringuey, appears to be at least in near agreement with Pennant's species. The chelipeds are much shorter than those of *E. tuberculosa*.

#### GEN. ARCANIA, Leach.

1817. *Arcania*, Leach, Zool. Miscell., vol. iii., p. 19.  
 1896. *A.*, Alcock, J. A. S. B., vol. lxx., pp. 167, 171, 262.

#### \* ARCANIA SEPTEMSPINOSA (Fabricius).

1787. *Cancer septemspinosus*, Fabricius, Mantissa Insectorum, vol. i., p. 325.  
 1886. *Arcania septemspinosa*, Miers, Challenger Brachyura, vol. xvii., Rep. 49, p. 300.

1896. *A. s.*, Alcock, J. A. S. B., vol. lxx., pp. 263, 265.

This species, No. 11426, has been sent me from the Cape by Dr. Péringuey.

#### GEN. LEUCISCA, McLeay.

1838. *Leucisca*, McLeay, Annulosa of S. Africa, p. 70.

1886. *L.*, Miers, Challenger Brachyura, vol. xvii., Rep. 49, p. 303.

#### \* *LEUCISCA SQUALINA*, McLeay.

1838. *Leucisca squalina*, McLeay, Annulosa of S. Africa, p. 70, pl. 3, figs. *a*, *b*.

1843. *L. s.*, Krauss, Südafrik. Crust., p. 53.

Krauss only says: "Macleay upon a single damaged specimen has established this sub-genus, which is closely related to *Philyra*, Leach, and probably cannot be separated from it."

Nos. 161, 162, from rocks at St. James, False Bay, sent by Dr. Gilchrist, appear to belong undoubtedly to this species, as they fully agree with McLeay's figure. The broad, much advanced, scarcely emarginate rostrum is a conspicuous feature. A female, 8 mm. long by nearly 10 mm. broad, showed a very broad pleon, with first segment very short, the last narrow, ovoid, all the intermediate segments soldered, but the second with faint suture, not produced to a point on either side as in Stimpson's *Carcinaspis*. A male, with carapace 9 mm. long, 10.5 mm. broad, has the pleon narrowly triangular, with forward directed arched lobe on back of penultimate segment.

#### GEN. CARCINASPIS, Stimpson.

1858. *Carcinaspis*, Stimpson, Pr. Ac. Sci. Philad, vol. x., p. 161.

1886. *C.*, Miers, Challenger Brachyura, vol. xvii., Rep. 49, p. 303.

1907. *C.*, Stimpson, Smithsonian. Misc. Coll., vol. xlix., p. 161.

#### *CARCINASPIS MARGINATUS*, Stimpson.

1858. *Carcinaspis marginatus*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 161.

1907. *C. m.*, Stimpson, Smithsonian. Misc. Coll., vol. xlix., p. 162, pl. 14 (facing p. 104), fig. 7.

"Found under stones at low-water mark, on rocky shores, at the Cape of Good Hope."



## FAMILY DORIPPIDÆ.

1852. *Dorippidæ*, Dana, U.S. Expl. Exp., vol. xiii., pp. 390, 398.  
1886. *D.*, Miers, Challenger Brachyura, vol. xvii., Rep. 49, p. 326.  
1896. *D.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxx., pt. 2, pp. 136, 273.

## GEN. DORIPPE, J. C. Fabricius.

1798. *Dorippe*, Fabricius, Suppl. Ent. Syst., p. 361.  
1896. *D.*, Alcock, J. A. S. B., vol. lxx., p. 275.

## \* DORIPPE LANATA (Linn.).

1767. *Cancer lanatus*, Linn., Systema Naturæ, ed. 12, p. 1044.  
1785. *C. l.*, Herbst, Krabben und Krebse, vol. i., pt. 6, p. 189, pl. 11, fig. 67.  
1825. *Dorippe lanata*, Desmarest, Consid. gén. Crust., p. 135, pl. 17, figs. 2, 2a.  
1837. *D. l.*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 155.

No. 251, sent by Dr. Gilchrist, is a small male specimen, with carapace 8.25 mm. long by 10 mm. broad, agreeing so well with the descriptions given by Herbst and Milne-Edwards, and with Herbst's figure except for the difference in the pleon dependent on the difference of sex, that the specific name cannot, I think, be in doubt. It was taken off the mouth of the Umhloti River, at a depth of 46 m.

## FAMILY RANINIDÆ.

1841. *Raninoidea*, de Haan, Crustacea Japonica, decas quinta, p. 136.  
1896. *Raninidæ*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxx., pp. 136, 288.  
1908. *R.*, Stebbing, S.A. Crustacea, pt. 4, p. 15.

## GEN. RANINA, Lamarck.

1801. *Ranina*, Lamarck, Syst. Anim. sans vertèbres, p. 156.  
1908. *R.*, Stebbing, S.A. Crustacea, pt. 4, p. 15.

## RANINA SCABRA (Fabricius).

1787. *Hippa scabra*, Fabricius, Mantissa Insectorum, vol. i., p. 330.  
1908. *R. s.*, Stebbing, S.A. Crustacea, pt. 4, p. 16.

A specimen from the Durban Museum.

## GEN. NOVUM NASINATALIS.

Carapace broader than long. Pleon of female distinctly seven-segmented, the earlier (first four) segments visible in dorsal view. First antennæ small, not contiguous with the eyes. Outer lamina of the second maxillæ narrowed at both ends. Exopod of the second maxillipeds very long and narrow, ending in a short geniculate two-jointed flagellum, penultimate joint of endopod wider than either of the neighbouring joints. Third maxillipeds extending beyond the front of the carapace, the narrow apices of the fourth joint bending so as to close upon the front; this joint, which is rather longer than the third, is broad at the base and almost conceals the three little terminal joints attached some way below its apex; the third and fourth joints and the exopod, which a little overtops the third, are smooth on the inner surface but strikingly denticulate on the ventral or outer surface. The chelipeds or first peræopods are inserted close to the third maxillipeds, but at a great distance from the remaining ambulatory pairs, which are crowded together, the fourth and fifth much shorter than the second and third, and having a tendency to assume a dorsal position. The female has pairs of slender biramous pleopods, with each ramus uniarticulate, on the second, third, fourth, and fifth segments.

It is not easy to say in what division or subdivision of the Oxy stomata this genus should be placed. The species for which it is founded has some resemblance to *Cyclodorippe uncifera*, Ortmann, but in *Cyclodorippe* the pleon has only six segments distinct. The second maxillipeds approach those of *Ebalia*, with which again the pleon will not agree. The third maxillipeds in their denticulation and produced fourth joint tend towards *Cymonomus granulatus*, Norman, but in that species the female is credited with only three pairs of pleopods.

## NASINATALIS DISJUNCTIPES, n. sp.

## Plate XLII.

The carapace may be described as rounded hexagonal, the hind margin broadly concave, the whole surface above and below denticulate, with the strongest teeth on the antero-lateral margins. The sternum and the back of the dilated pleon are also more or less roughened. The small eyes embedded in spicules, with faintly orange-coloured faceted cornea, are placed on two elevated tracts at some distance behind the small first antennæ. These are not easily brought out of the groove in which they lie, one on either

side of a small finely pectinate plate apparently belonging to the epistome.

The broadly rounded cutting edge of the mandible has a little tooth projecting from its centre; the palp is small. Of the biseriata branchial plumes shown on the plate, the larger couple probably belonged to the third maxilliped, the smaller to the cheliped, two arthrobranchiæ being the proper complement for each of these appendages in the Oxystomata (see Ortmann, Zool. Jahrb., vol. vi., p. 551, 1892).

The chelipeds are remarkable, not only for their place of insertion far in front of the other legs, but also from the wide gap which separates the long finger at its insertion from the strange, somewhat crooked, doubly dentate thumb. The finger is curved at the end, and is also furnished with teeth, which are less conspicuous than those of the shorter thumb. All the peræopods are more or less granular and hairy, the fingers in the last four pairs being as long as the preceding joint.

In the largest specimen the carapace measured 6 mm. in length by 10 mm. in breadth; the length of the back, including the first four segments of the pleon, being 11 mm.

All three specimens were females. The specific name alludes to the wide disjunction between the first and second peræopods. The readiness with which specimens disjoin their limbs is, unfortunately, a character common to many species. There were, however, six of the quaint chelipeds to be allotted to the three specimens.

For No. 240, the locality of this species was stated by Dr. Gilchrist to be "Cape Natal N.W.  $\frac{1}{2}$  W.  $5\frac{1}{2}$  miles; 62 fathoms," or 113 m.

The generic name, compounded of the Latin *nasus*, a nose or Ness, and the local designation Natal, identifies this novelty with Cape Natal, where it was discovered.

### BRACHYURA ANOMALA.

1839. *Dromiacea*, de Haan, Crustacea Japonica, decas quarta, p. 102.  
1899. *Brachyura anomala*, Alcock, Deep Sea Brachyura of Investigator, p. 6, and *Dromiacea* or *Brachyura primigenia*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxviii., pt. 2, p. 124.  
1900. *Brachyura anomala* (part), Stebbing, S.A. Crustacea, pt. 1, p. 22.  
1902. *B. a.*, Stebbing, *ibid.*, pt. 2, p. 18.  
1905. *B. a.*, Stebbing, *ibid.*, pt. 3, p. 68

1907. *Dromiacea*, Borradaile, Ann. Nat. Hist., Ser. 7, vol. xix., pp. 477, 479.  
 1909. *D.*, Calman, Crustacea, pt. 7, fasc. 3, in Lankester's Treatise on Zoology, p. 314.

## FAMILY DROMIIDÆ.

1899. *Dromiidæ* Alcock, J. A. S. B., vol. lxxviii., pp. 128, 135.  
 1900. *D.*, Stebbing, S.A. Crustacea, pt. 1, p. 23.  
 1901. *D.*, Alcock, Catal. Indian Decap. Crust., p. 37.  
 1902. *D.*, Stebbing, S.A. Crustacea, pt. 2, p. 19.  
 1905. *D.*, Stebbing, *ibid.*, pt. 3, p. 60

## GEN. DROMIA, J. C. Fabricius.

1798. *Dromia*, Fabricius, Suppl. Ent. Syst., p. 359.  
 1905. *D.*, Stebbing, S.A. Crustacea, pt. 3, p. 61.

## \* DROMIA DORMIA (Linn.).

1763. *Cancer dormia*, Linn., Amoen. Acad., vol. vi., p. 413.  
 1905. *D. d.*, Stebbing, S.A. Crustacea, pt. 3, p. 61.  
 No. 39, sent by Dr. Gilchrist, was obtained from Buffalo Bay (in False Bay), at a depth of 55 m. Another specimen, obtained in Natal Bay, was sent from the Durban Museum.

## GEN. DROMIDIA, Stimpson.

1858. *Dromidia*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 225 (63).  
 1866. *Dromidea*, Heller, Novara Crustacea, p. 72.  
 1905. *Dromidia*, Stebbing, S.A. Crustacea, pt. 3, p. 62.  
 1907. *D.*, Stimpson, Smithson. Misc. Coll., vol. xlix., p. 170.

## DROMIDIA HIRSUTISSIMA (Lamarck).

1818. *Dromia hirsutissima* Lamarck, Hist. Nat. Anim. sans vertèbres, vol. v., p. 264. Inhabits the seas of the Cape of Good Hope.  
 1825. *D. h.*, Desmarest, Consid. gén. Crust., p. 137, pl. 18, fig. 1.  
 From the Cape of Good Hope.  
 1837. *D. hirtissima*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 176.  
 1838. *D. h.*, McLeay, Annulosa of S. Africa, p. 71.  
 1839. *D. hirsutissima*, de Haan, Crustacea Japonica, decas quarta, p. 104.



1843. *D. h.*, Krauss, Südafrik. Crust., p. 52.

Krauss only says that the species is unknown to him.

1858. *Dromidia h.*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 225.

1907. *D. h.*, Stimpson, Smithson. Misc. Coll., vol. xlix., p. 170.

Stimpson, in discussing the genus, says: "In the typical species, *D. hirsutissima*, the palpus of the outer maxillipeds is articulated to the meros rather at its apex than at its inner angle, as noticed by de Haan. This, however, results from the elongation of the meros-joint and the obliquity of its anterior margin. It does not seem to be a character of much importance, and is not seen in other species of the genus."

#### DROMIDIA (?) ROTUNDA (McLeay).

1838. *Dromia rotunda*, McLeay, Annulosa of S. Africa, p. 71.

1843. *D. r.*, Krauss, Südafrik, Crust., p. 52.

Krauss was unacquainted with this species.

1858. *Dromidia* (?) *r.*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 225 (63).

1907. *D.* (?) *r.*, Stimpson, Smithson. Misc. Coll., vol. xlix., p. 170.

Speaking of *Dromie*, too vaguely described for exact classification, Stimpson says: "We conjecture that *D. globosa*, *gibbosa*, *unidentata*, and *rotunda* will be found to belong to the present genus." Alcock in 1899, and Doflein in 1904, dispense with *Dromidia*, as being only a synonym of *Dromia*. For the possible transference of *D. rotunda* to *Exodromidia*, see Studer's opinion noticed below.

#### DROMIDIA SPONGIOSA, Stimpson.

1858. *Dromidia spongiosa*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 238 (76).

1888. *D. s.*, Henderson, Challenger Anomura, vol. xxvii., Rep. 69, p. 12, pl. 1, fig. 6.

Simon's Bay, Cape of Good Hope; 18 to 36 m. depth.

1907. *D. s.*, Stimpson, Smithson. Misc. Coll., vol. xlix., p. 171, pl. 20 (facing p. 172), fig. 1.

"Dredged from a rocky bottom in 20 fathoms, in False Bay, Cape of Good Hope."

#### \* DROMIDIA (?) BICORNIS, Studer.

1883. *Dromidia* (?) *bicornis*, Studer, Gazelle Crustacea, Abhandl.

K. Akad., Berlin, 1882, p. 20, pl. 1, figs. 9a, 9b.

South of the Cape of Good Hope, in 214 m. depth.

1888. *D. b.*, Henderson, Challenger Anomura, vol. xxvii., Rep. 69, p. 13.  
Off the Agulhas Bank, in 274 m. depth.
1904. *Dromia b.*, Doflein, Valdivia Brachyura, p. 8, pl. 6, figs. 3-5.  
Off Cape Town at 106 m.; in Francis Bay; at Cape of Good Hope, 318 m.
1905. *Dromidia* (?) *b.*, Stebbing, S.A. Crustacea, pt. 3, p. 63.  
No. 115, sent by Dr. Gilchrist, from Vasco de Gama Point, S. 75 E.,  $13\frac{1}{2}$  miles; depth 303 m.

GEN. EXODROMIDIA, Stebbing.

1905. *Exodromidia*, Stebbing, S.A. Crustacea, pt. 3, p. 64.

\* EXODROMIDIA SPINOSA (Studer).

1883. *Dromidia spinosa*, Studer, Gazelle Crustacea, Abhandl. K. Akad., Berlin, 1882, p. 22, pl. 1, figs. 10a, 10b.  
From the Cape of Good Hope, in 216 m. depth, along with the preceding species, and carrying on its back a blue sponge. Studer says: "This species belongs to a group which includes *D. unidentata*, Rüpp., and *rotunda*, Mc.Leay, while a special type is formed by *D. bicornis* and *spongiosa*, Stps., the latter of which possesses no rostrum (keinen Stirnschnabel)." But Stimpson himself says that in *D. spongiosa*, "the front is triangular, pointed, and very much deflexed."
1904. *Dromia s.*, Doflein, Valdivia Brachyura, p. 9, pl. 6, figs. 1, 2.  
Off Cape Town, at 178 m. depth, and in Francis Bay.
1905. *Exodromidia s.*, Stebbing, S.A. Crustacea, pt. 3, p. 65, pl. 18.  
No. 249, sent by Dr. Gilchrist, from Cape Point, N.E. by E.  $\frac{3}{4}$  E., 8 miles; depth 166 mm.

GEN. CRYPTODROMIA, Stimpson.

1858. *Cryptodromia*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 225.
1899. *C.*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxxviii., pp. 135, 140.
1907. *C.*, Stimpson, Smithson. Misc. Coll., vol. xlix., p. 172.

CRYPTODROMIA (?) CAPUT-MORTUUM (Linn.).

1767. *Cancer caput-mortuum*, Linn., Systema Naturæ, ed. 12, p. 1050.
1775. *Pagurus c.*, Fabricius, Systema Entomologiæ, p. 411.

1787. *P. c.*, Fabricius, Mantissa Insectorum, vol. i., p. 328.  
 1793. *Cancer ægagropila*, Fabricius, Entomologia Systematica, vol. ii., p. 456.  
 1798. *Dromia æ.*, Fabricius, Suppl. Ent. Syst., p. 360.  
 1803. *D. caput-mortuum*, Latreille, Hist. Nat. Crust. et Ins., vol. v., p. 384 (not 284 as given by Milne-Edwards).  
 1825. *D. egagropila*, Desmarest, Consid. gén. Crust., p. 138.

Under "Dromie tête de-mort: *Dromia clypeata*, Latr.; *Cancer caput-mortuum*, Linn.," Desmarest states that "Fabricius describes under the name *Dromia egagropila* a species from the Cape of Good Hope." In the Ent. Syst. and its Supplement Fabricius only gives the habitat as the Southern Ocean.

1907. *Cryptodromia* (?) *caput-mortuum*, Stimpson, Smithson. Misc. Coll., xlix., p. 173.

As in 1858, Stimpson doubtfully refers the species *caput mortuum* to his genus *Cryptodromia*.

#### GEN. PSEUDODROMIA, Stimpson.

1858. *Pseudodromia*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 226 (64).  
 1900. *P.*, Stebbing, S.A. Crustacea, pt. 1, p. 23.  
 1904. *P.*, Doflein, Valdivia Brachyura, p. 12.  
 1907. *P.*, Stimpson, Smithson. Misc. Coll., vol. xlix., p. 177.

#### \* PSEUDODROMIA LATENS, Stimpson.

1858. *Pseudodromia latens*, Stimpson, Pr. Ac. Sci. Philad., vol. x., pp. 226 (64), 240 (78).  
 1888. *P. l.*, Henderson, Challenger Anomura, vol. xxvii., Rep. 69, p. 16, pl. 1, fig. 8.

Simon's Bay, Cape of Good Hope, 18 to 22 m. depth.

1900. *P. l.*, Stebbing, S.A. Crustacea, pt. 1, p. 24.  
 Nos. 15, 16, 29, specimens sent by Dr. Gilchrist, were from False Bay, one of the two females taken at about 18 m. depth, near Muizenberg; a male taken at 55 m. depth, embedded in a compound ascidian, probably that named in the next reference.

1904. *P. l.*, Doflein, Valdivia Brachyura, p. 12, pl. 8, figs. 1-6.

Francis Bay, at about 100 m. depth. The cloaking ascidian in the Valdivia expedition was determined by Michaelsen to be *Synandrocarpa domuncula*, Michaelsen.

1907. *P. l.*, Stimpson, Smithson. Misc. Coll., vol. xlix., p. 178, pl. 21, fig. 3.

"It was dredged in twelve fathoms on a sandy bottom in Simon's Bay, Cape of Good Hope."

#### GEN. EUDROMIA, Henderson.

1888. *Eudromia*, Henderson, Challenger Anomura, vol. xxvii., Rep. 69, p. 13.

#### EUDROMIA FRONTALIS, Henderson.

1888. *Eudromia frontalis*, Henderson, Challenger Anomura, vol. xxvii., Rep. 69, p. 14, pl. 1, fig. 7.  
Off the Agulhas Bank, at 274 m. depth.

#### GEN. CONCHÆCETES, Stimpson.

1858. *Conchæcetes*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 226 (64).  
1902. *C.*, Stebbing, S.A. Crustacea, pt. 2, p. 19.  
1907. *C.*, Stimpson, Smithson. Misc. Coll., vol. xlix. p. 180.

#### \* CONCHÆCETES ARTIFICIOSUS (Fabricius).

1798. *Dromia artificiosa*, Fabricius, Suppl. Ent. Syst., p. 360.  
1902. *Conchæcetes artificiosus*, Stebbing, S.A. Crustacea, pt. 2, p. 19.  
No. 159, sent by Dr. Gilchrist, from Amatikulu River N.W., distant  $7\frac{1}{2}$  miles (coast of Zululand), 43 m. depth.  
1907. *C. a.*, Stimpson, Smithson. Misc. Coll., vol. xlix., p. 180, pl. 21 (facing p. 178), fig. 5.

#### FAMILY DYNOMENIDÆ.

1892. *Dynomenidæ*, Ortmann, Zool. Jahrb., vol. vi., p. 541.  
1905. *D.*, Stebbing, S.A. Crustacea, pt. 3, p. 58.

#### GEN. DYNOMENE, Desmarest.

1825. *Dynomène*, Latreille. A French form without Latin equivalent in Familles Naturelles du Règne Animal, p. 273.  
1825. *Dynomene*, Desmarest, Consid. gén. Crust. p. 442.  
The Latin form in index reference to *Dynomène*, mentioned on p. 133 footnote.  
1905. *D.*, Stebbing, S.A. Crustacea, p. 58.



\* DYNOMENE PLATYARTHRODES, Stebbing.

1905. *Dynomene platyarthrodes*, Stebbing, S.A. Crustacea, pt. 3, p. 59, pl. 17.

No. 212, sent by Dr. Gilchrist, from Cape Point, N.E. by E., 36 miles; depth between 1,190 and 1,280 m.

FAMILY HOMOLIDÆ.

1888. *Homolidæ*, Henderson, Challenger Anomura, vol. xxvii., Rep. 69, p. 18.

1902. *H.*, Stebbing, S.A. Crustacea, pt. 2, p. 20.

GEN. HOMOLA, Leach.

1815. *Homola*, Leach, Trans. Linn. Soc., vol. xi., p. 324, and Zoological Miscellany, vol. ii., p. 81.

1902. *H.*, Stebbing, S.A. Crustacea, pt. 2, p. 21.

\* HOMOLA BARBATA (Fabricius).

1793. *Cancer barbatus*, Fabricius, Ent. Syst., vol. ii., p. 460.

1815. *Homola spinifrons*, Leach, Zool. Misc., vol. ii., p. 82, pl. 88.

1902. *H. barbata*, Stebbing, S.A. Crustacea, pt. 2, p. 22.

No. 46, specimen sent by Dr. Gilchrist, from False Bay,  $2\frac{1}{2}$  miles W.S.W. from Cape Point Lighthouse; depth 58 m.

FAMILY LATREILLIIDÆ.

1899. *Latreillidæ*, Alcock, Journ. Asiat. Soc. Bengal, vol. lxviii., pt. 2, pp. 130, 165.

1902. *Latreillidæ*, Stebbing, S.A. Crustacea, pt. 2, p. 23.

GEN. LATREILLIA, Roux.

1828. *Latreillia*, Roux, Crustacés de la Méditerranée, livraison v., pl. 22.

1902. *L.*, Stebbing, S.A. Crustacea, pt. 2, p. 23.

\* LATREILLIA ELEGANS, Roux.

1828. *Latreillia elegans*, Roux, Crust. Médit., pl. 22.

1902. *L. e.*, Stebbing, S.A. Crustacea, pt. 2, p. 24.

No. 150, sent by Dr. Gilchrist, from Natal, two miles N. by W. of Umbwalumi River; depth 46 m.

## MEGALOPIDEA.

Larval decapods not yet affiliated to adult specimens of the genera and species which they represent.

## GEN. MARESTIA, Dana.

1852. *Marestia*, Dana, U.S. Expl. Exp., vol. xiii., p. 487.

In separating this genus for part of *Monolepis*, Say, Dana defines it as follows: Carapace tricuspid in front, but the rostrum strongly deflexed and the front seen from above not acute in the middle. The four pairs of ambulatory feet not armed below at the base; the last pair often resting above the carapace, the depression for receiving them sparingly concave; the fingers stiliform, compressed, armed below [on the inner margin] with spines [teeth], the finger of the last pair apically furnished with long setæ. Dana was quite aware that he was dealing with immature forms. *Marestia* has apparently not yet been affiliated to its true parents.

## \* MARESTIA PÆDERUS (Herbst).

1799. *Cancer pæderus*, Herbst, Krabben und Krebse, vol. iii., pt. 1, p. 51, pl. 47, fig. 1, fig. A.

Herbst speaks of the ambulatory feet as having flat, thin, very smooth joints, without mentioning the teeth on the finger-margins, which distinguish this genus from *Monolepis*, but the teeth seem to be indicated in his figure. He also speaks of the telson as having no side-fins; but this is probably an error of observation, the single plates of the uropods easily escaping notice.

1825. *Megalopa mutica* (?), Desmarest, Consid. gén. Crust., p. 201, pl. 34, fig. 2, *a*, *b*, *c*.

1843. *Megalops m.*, Krauss, Südafrik. Crust., p. 54.

Occurs in Table Bay, pretty frequently.

1849. *M. m.*, de Haan, Crustacea Japonica, p. 166.

Specimens from the Cape of Good Hope seem to agree completely with the French specimens.

1852. *Marestia elegans*, Dana, U.S. Expl. Exp., vol. xiii., p. 488, pl. 31, fig. 2*a-i*.

"Off Cape of Good Hope, abundant."

No. 118, two similar specimens, sent by Dr. Gilchrist, were taken at a depth of 55 m., Vondeling Island, N.  $\frac{1}{4}$  W.  $3\frac{1}{2}$  miles. The one examined had a carapace a little over 6 mm. long by

5 mm. broad at the broadest part. The general appearance strikingly recalled Herbst's figure. The details, apart from colour, agree with Dana's description and figures. These include the strongly tricuspid front, the second antennæ, with stiffly outstanding setæ at apex of fourth joint from the end, with three short joints following, the finger of the second peræopod with seven teeth, of which the fifth is the longest, the finger of the last peræopod with six teeth and long apical setæ.

## MACRURA.

### MACRURA ANOMALA.

1849. *Anomala*, de Haan, Crustacea Japonica, decas sexta, p. 195.  
 1893. *Macrura anomala*, Stebbing, History of Crustacea, p. 147.  
 1902-5-8. *M. a.*, Stebbing, S.A. Crustacea, pt. 2, p. 27; pt. 3, p. 68; pt. 4, p. 18.

## TRIBE PAGURIDEA.

### FAMILY LITHODIDÆ.

1853. *Lithodidæ*, Dana, U.S. Expl. Exp., vol. xiii., p. 1430.  
 1900. *L.*, Stebbing, Proc. Zool. Soc. London, p. 530.  
 1905. *L.*, Stebbing, S.A. Crustacea, pt. 3, p. 68.

### GEN. NEOLITHODES, A. Milne-Edwards and Bouvier.

1894. *Neolithodes*, A. M.-Edw. and Bouvier, Bull. Soc. Zool. France, vol. xix., p. 121.  
 1905. *N.*, Stebbing, S.A. Crustacea, pt. 3, p. 69.

### \*NEOLITHODES CAPENSIS, Stebbing.

1905. *Neolithodes capensis*, Stebbing, S.A. Crustacea, pt. 3, p. 70, pls. 19, 20.

No. 171, sent by Dr. Gilchrist, was taken off Cape Point, N. 70° E., 40 miles; depth about 1,460 m. No. 174, also sent by Dr. Gilchrist, is probably the young of this species. It was taken off Cape Point, E.  $\frac{3}{4}$  N., 38 miles; depth 1,150 m.

## FAMILY PAGURIDÆ.

1852. *Paguridæ*, Dana, U.S. Expl. Exp., vol. xiii., p. 435.  
 1900. *P.*, Stebbing, Proc. Zool. Soc. London, p. 534.  
 1905. *P.*, Alcock, Catalogue of the Indian Decapod Crustacea in the Indian Museum, pt. 2, fasc. 1, p. 23.  
 It should be noted that Alcock's work is a storehouse of information on the whole subject.

GEN. PAGURUS, Fabricius, *sensu restricto*.

1775. *Pagurus* (part), Fabricius, Systema Entomologiæ, p. 410.  
 1852. *P.*, Dana, U.S. Expl. Exp., vol. xiii., p. 449.  
 1875. *Dardanus*, Paulson, Red Sea Crustacea, p. 90.  
 1900. *Petrochirus*, Rathbun, Pr. U.S. Nat. Mus., vol. xxii., p. 302.  
 1900. *Pagurus*, Stebbing, Proc. Zool. Soc. London, p. 535.  
 1901. *Pagurias*, Benedict. Bull. U.S. Fish. Comm. for 1900, p. 141.  
 1903. *Dardanus*, Rathbun, Pr. U.S. Nat. Mus., vol. xxvi., p. 33.  
 1905. *Pagurus*, Alcock, Catal. Indian Decap. Crust., pt. 2, fasc. 1, pp. 78, 168.  
 1908. *P.*, Stebbing, S.A. Crustacea, pt. 4, p. 21.

## \* PAGURUS ARROSOR (Herbst).

1796. *Cancer arrosor* (Herbst), Krabben und Krebse, vol. ii., pt. 6, p. 170, pl. 43, fig. 1.  
 1900. *Petrochirus a.*, Rathbun, Pr. U.S. Nat. Mus., vol. xxii., p. 302.  
 1905. *Pagurus a.*, Alcock, Catal. Indian Decap. Crust., pt. 2, fasc. 1, pp. 79, 168.  
 1907. *Dardanus a.*, Rathbun, Smithson. Misc. Coll., vol. xlix., p. 206, footnote correction to Stimpson's "*Pagurus striatus* Latreille."  
 1908. *Pagurus a.*, Stebbing, S.A. Crustacea, pt. 4, p. 22.  
 No. 239, sent by Dr. Gilchrist, was taken off Great Fish Point Lighthouse, N.  $\frac{1}{2}$  W.,  $2\frac{1}{2}$  miles; depth 55 m.

## PAGURUS MEGISTOS (Herbst).

1804. *Cancer megistos*, Herbst, Krabben und Krebse, vol. iii., pt. 4, p. 23, pl. 61, fig. 1.  
 1811. *Pagurus m.*, Olivier, Encycl. Méth., vol. viii., p. 639.  
 1905. *P. punctulatus*, Alcock, Catal. Indian Decap. Crust., pt. 2, fasc. 1, pp. 80, 81, 168.



1907. *Dardanus megistos*, Rathbun, Smithson. Misc. Coll., vol. xlix., p. 205, footnote correction to Stimpson's "*Pagurus punctulatus* Olivier."  
 1908. *Pagurus megistos*, Stebbing, S.A. Crustacea, pt. 4, p. 21. Durban Museum.

GEN. PETROCHIRUS, Stimpson.

1858. *Petrochirus*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 233 (71).  
 1905. *P.*, Alcock, Catal. Indian Decap. Crust., pt. 2, fasc. 1, p. 170.

PETROCHIRUS BAHAMENSIS (Herbst).

1791. *Cancer bahamensis*, Herbst, Krabben und Krebse, vol. ii., pt. 1, p. 30.  
 1811. *Pagurus granulatus*, Olivier, Encycl. Méth., vol. viii., p. 640.  
 1858. *Petrochirus g.*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 333 (71).  
 1888. *Pagurus g.*, Henderson, Challenger Anomura, vol. xxvii., Rep. 69, p. 56.

From Simon's Bay; between 18 and 36 m. depth. Henderson had a specimen 190 mm. long. He remarks that its occurrence at the Cape greatly increases its range of distribution.

1897. *Petrochirus bahamensis*, Rathbun, Annals of the Institute of Jamaica, vol. i., p. 52.  
 1905. *P. granulatus*, Alcock, Catal. Indian. Decap. Crust., pt. 2, fasc. 1, p. 170.

GEN. PAGURISTES, Dana.

1852. *Paguristes*, Dana, U.S. Expl. Exp., vol. xiii., pp. 435, 436.  
 1905. *P.*, Alcock, Catal. Indian Decap. Crust., pt. 2, fasc. 1, pp. 30, 154.

Alcock supplies numerous intermediate references.

PAGURISTES GAMIANUS (Milne-Edwards).

1836. *Pagurus gamianus*, M.-Edw., Ann. Sci. Nat., Zool. ser. 2, vol. vi., p. 283.  
 1837. *P. g.*, M.-Edw., Hist. Nat. Crust., vol. ii., p. 235.  
 "Found at the Cape of Good Hope by M. Reynaud."  
 1843. *P. g.*, Krauss, Südafrik. Crust., p. 57.  
 Krauss supplies no independent information.  
 1905. *Paguristes g.*, Alcock, Catal. Indian Decap. Crust., pt. 2, fasc. 1, p. 157.

## GEN. CLIBANARIUS, Dana.

1852. *Clibanarius*, Dana, U.S. Expl. Exp. vol. xiii., pp. 435, 461.  
 1893. *C.*, A. Milne-Edwards and Bouvier, Mem. Mus. Comp. Zoöl. Harvard, vol. xiv., No. 3, p. 156.  
 1905. *C.*, Alcock, Catal. Indian Decap. Crust., pt. 2, fasc. 1, pp. 40, 158.

## CLIBANARIUS VULGARIS, Dana.

1791. *Cancer clibanarius*, Herbst, Krabben und Krebse, vol. ii., pt. 1, p. 20, pl. 23, fig. 1.  
 1837. *Pagurus c.*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 227.  
 1843. *P. c.*, Krauss, Südafrik. Crust., p. 56.

Krauss says: "This species is the largest among the hermit crabs occurring in South Africa, and is found in Natal Bay on the muddy banks overgrown with *Zostera marina* L. It inhabits especially the shells of *Tritonium succinctum* LAM., *Ranella granifera* LAM., and *Buccinum luteostoma* CHEMN. Colour greenish brown with bright brown hairs and with bright blue longitudinal stripes on the feet. I have never found examples over 3 inches long."

1852. *Clibanarius vulgaris*, Dana, U.S. Expl. Exp., vol. xiii., p. 462.  
 1905. *C. clibanarius*, Alcock, Catal. Indian Decap. Crust., pt. 2, fasc. 1, p. 43, pl. 4, fig. 1.  
 1908. *C. vulgaris*, Stebbing, S.A. Crustacea, pt. 4, p. 21.  
 Specimen from the Durban Museum.

## CLIBANARIUS VIRESCENS (Krauss).

1843. *Pagurus virescens*, Krauss, Südafrik. Crust., p. 56, pl. 4, fig. 3.  
 "This species is very common on the rocky coast of Natal, where it inhabits all the shells that offer from the size of *Ranella granifera* LAM. to a *Cerithium* scarcely 4 lines long. The largest examples have a length of one inch from the frontal margin to the apex of the pleon."  
 1852. *Clibanarius v. (?)*, Dana, U.S. Expl. Exp., vol. xiii., p. 466, pl. 29, figs. 6a, 6b.

Dana's figures are not easy to reconcile with those of Krauss, and Dana's statement that in Krauss's figure "the carpus is not more than half as long as broad" is untenable.

1905. *C. v.*, Alcock, Catal. Indian Decap. Crust., pt. 2, fasc. 1, p. 159.

## GEN. CALCINUS, Dana.

1852. *Calcinus*, Dana, U.S. Expl. Exp., vol. xiii., pp. 435, 456.  
1905. *C.*, Alcock, Catal. Indian Decap. Crust., pt. 2, fasc. 1,  
pp. 51, 163.

## CALCINUS ELEGANS (Milne-Edwards).

1836. *Pagurus elegans*, M.-Edw., Ann. Sci., Nat., Ser. 2, vol. vi.,  
p. 278, pl. 13, fig. 2.  
1843. *P. e.*, Krauss, Südafrik. Crust., p. 57.  
"An extremely delicate species, of which I only found a  
single specimen in *Nerita plicata* LAM. on the coast of Natal."  
"The whole length amounts to about 1 inch."  
1852. *Calcinus e.*, Dana, U.S. Expl. Exp., vol. xiii., p. 458, pl. 28,  
fig. 10 *a*, *b*, *c*.  
1905. *C. e.*, Alcock, Catal. Indian Decap. Crust., pt. 2, fasc. 1, p. 55,  
pl. 5, fig. 2.

## CALCINUS LÆVIMANUS (Randall).

1839. *Pagurus lævimanus*, Randall, J. Ac. Sci. Philad., vol. viii.,  
p. 135.  
1843. *P. tibicen*, Krauss, Südafrik. Crust., p. 57.  
"This species lives on the rocky coast of Natal, is rather  
rare, and inhabits especially the smaller shells of *Ranella*  
*granifera* LAM."  
1852. *Calcinus tibicen*, Dana [not *C. tibicen* (Herbst)], U.S. Expl.  
Exp., vol. xiii., p. 457.  
1887. *C. herbstii*, de Man, Arch. Naturg., vol. liii., p. 437.  
1905. *C. h.*, Alcock, Catal. Indian Decap. Crust., pt. 2, fasc. 1,  
p. 53, pl. 5, fig. 4.  
1907. *C. lævimanus*, Rathbun, Smithson. Misc. Coll., vol. xlix.,  
p. 208, footnote correction of Stimpson's "*Calcinus*  
*tibicen* (Herbst) Dana."

## GEN. DIOGENES, Dana.

1852. *Diogenes*, Dana, U.S. Expl. Exp., vol. xiii., pp. 435, 438.  
1893. *D.*, Henderson, Trans. Linn. Soc., London, vol. v., pt. 10,  
p. 411.  
1905. *D.*, Alcock, Catal. Indian Decap. Crust., pt. 2, fasc. 1,  
p. 59, 164.

## DIOGENES MILES (Fabricius).

1787. *Pagurus miles*, Fabricius, Mantissa Insectorum, vol. i., p. 327.  
 1791. *Cancer m.*, Herbst, Krabben und Krebse, vol. ii., pt. 1, p. 19,  
 pl. 22, fig. 7.  
 1843. *Pagurus m.*, Krauss, Südafrik. Crust., p. 58.

"This species is very common on the sandbanks of Natal Bay, and occurs in all sizes in the shells found there, especially in *Natica mamilla* L., *Buccinum arcularia* L., *Murex*, *Pyrula*, *Trochus* and *Nassa*. The colour is dusky yellowish with brownish longitudinal stripes on the two front feet. My largest specimens are not over two inches long."

*Diogenes m.* (Krauss).

This species is involved in obscurity at present. Krauss, while adopting the specific name *miles*, gives a reference, not to Herbst's *Cancer miles*, but to his *Cancer Diogenes*. Henderson, in 1893, Tr. Linn. Soc., vol. v., p. 413, under the species "*Diogenes Diogenes* (Herbst)" remarks that: "Krauss records the species from Natal, and Richter records it from Madagascar, but their specimens were perhaps referable to some other *Diogenes*." He adds in a footnote that: "In the British Museum collection there are examples of a large and perfectly distinct species from Natal." Under "*Diogenes miles* (Herbst)" Henderson says: "This species lives invariably in shells with a narrow aperture, and its marked peculiarities of form are due to this fact; at Madras it is nearly always found in *Oliva* shells." He does not state the size, but gives 60 mm. as the total length of the body in a full-grown adult of *Diogenes diogenes* (Herbst).

## DIOGENES BREVIROSTRIS, Stimpson.

1858. *Diogenes brevirostris*, Stimpson, Pr. Ac. Sci. Philad. vol. x.,  
 pp. 233 (71), 245 (83).  
 Simon's Bay, 21 m.  
 1888. *D. b.*, Henderson, Challenger Anomura, Reports, vol. xxvii.,  
 p. 53, pl. 6, fig. 3.  
 Simon's Bay, 18-36 m.

Henderson says: "This species may eventually prove to be synonymous with *Diogenes varians* (Costa), as the latter appears to be subject to considerable variation."

1905. *D. b.*, Alcock, Catal. Indian Decap. Crust., pt. 2, fasc. 1,  
 p. 166.



1907. *D. b.*, Stimpson, Smithson. Misc. Coll., vol. xlix., p. 201, pl. 19 (facing p. 166), fig. 2.

"Dredged in twelve fathoms on a sandy bottom in Simon's Bay, Cape of Good Hope."

\* *DIAGENES COSTATUS*, Henderson.

1893. *Diogenes costatus*, Henderson, Tr. Linn. Soc. London, Ser. 2, vol. v., pt. 10, p. 418, pl. 39, figs. 7, 8.

1908. *D. c.*, Stebbing, S.A. Crustacea, pt. 4, p. 24.

No. 239, sent by Dr. Gilchrist, from Great Fish Point Lighthouse, N.  $\frac{1}{2}$  W.,  $2\frac{1}{2}$  miles, depth 55 m.

\* *DIAGENES EXTRICATUS*, n.n.

1791. *Cancer diogenes*, Herbst, Krabben und Krebse, vol. ii., pt. 1, p. 17, pl. 22, fig. 5.

Henderson, Tr. Linn. Soc., vol. v., p. 411, considers that probably several species are included under the name *Cancer diogenes*, Linn., 1767, and that the species named *Pagurus diogenes* by Fabricius in 1775 and 1787 was "unrecognisable, perhaps a *Pagurus*." Since, then, Herbst's species is not necessarily identical with any one of those covered by the Linnean name, and may be generically distinct from that named by Linnæus, the safest plan is to consider Herbst's use of the name as void by preoccupation. Henderson, however, names a species *Diogenes diogenes* (Herbst), which he identifies with *Pagurus miles*, Fabricius, 1798, Milne-Edwards, 1837, and *Diogenes miles*, Dana, 1852. But between Dana's species and Herbst's there is a notable difference. In Dana's, as Henderson well expresses it, "The ophthalmic process is narrow and elongate, exceeding the ophthalmic scales by almost half its length, and the distal half is armed with well-developed lateral spinules." In Herbst's figure the process only reaches the top of the scales, and is spoken of as little, without any allusion to denticulation. In this, as generally in other respects, our specimen agrees with Herbst's figure and description. The ophthalmic scales are fringed with a dozen graduated teeth. The smaller cheliped of the right side is conspicuously beset with the long yellow hairs which Herbst mentions. The carapace measures 20 mm. in the central line of its length. The pleon is missing. No. 236, a male, sent by Dr. Gilchrist, was obtained off Seal Island, W.S.W. (Mossel Bay). The specific name refers to the disentanglement of the synonymy and the rescue of the species from a tautologous designation.

## GEN. EUPAGURUS, Brandt.

1851. *Eupagurus*, Brandt, Middendorff's Sibirische Reise, Zool. pt. 1, p. 105.  
 1888. *E.*, Henderson, Challenger Anomura, Reports, vol. xxvii., p. 62.  
 1905. *E.*, Alcock, Catal. Indian Decap. Crust., part 2, fasc. 1, pp. 122, 174.

## \* EUPAGURUS TRISTANENSIS, Henderson.

1888. *Eupagurus tristanensis*, Henderson, Challenger Anomura, Reports, vol. xxvii., p. 66, pl. 7, figs. 5, 5a.  
 1910. *E.t.*, Stebbing, S.A. Crustacea, pt. 5.

No. 235, a specimen, taken by Dr. Gilchrist, Scottsburgh Lighthouse, N.W. by N., 8 miles, depth 168 m., agrees well with Henderson's description of his species, which was taken off Nightingale Island, Tristan da Cunha from a depth of 201 m. The present specimen is imperfect, wanting the right cheliped; the left cheliped agrees with Henderson's description, but certainly falls short of the 9 mm. which he gives as its length, though the body of the animal is fully 10 mm. long, as was the case with the "Challenger" specimen. In both instances the shell occupied was the "Challenger" species *Murex* (*Pseudomurex*) *aëdonius*, Watson.

## GEN. PARAPAGURUS, S. I. Smith.

1879. *Parapagurus*, Smith, Trans. Connecticut Academy, vol. v., pt. 1, p. 50.  
 1900. *P.*, Stebbing, S.A. Crustacea, pt. 1, p. 27.  
 1905. *P.*, Alcock, Catal. Indian Decap. Crust., pt. 2, fasc. 1, pp. 98, 171.

## \* PARAPAGURUS DIMORPHUS (Studer).

1883. *Eupagurus dimorphus*, Studer, Abhandl. k. Ak. Wiss., Berlin, 1882, p. 24, pl. 2, figs. 11, 12.

"In shells of *Buccinum porcatum* Gm., completely covered by colonies of *Epizoanthus cancrisocius* v. Mart.," South of Cape of Good Hope, lat. 34° 13' 6" S., long. 15° 0' 7" W., from 220 m. depth.

1888. *Parapagurus d.*, Henderson, Challenger Anomura, Reports, vol. xxvii., p. 86, pl. 10, fig. 1.

Off the Agulhas Bank; depth 274 m.; inhabiting shells which have become almost completely absorbed by an investing *Epizoanthus*.

1900. *P. d.*, Stebbing, S.A. Crustacea, pt. 1, p. 28.  
 No. 41A, sent by Dr. Gilchrist, from lat. 34° 3' 15" S., long.  
 18° 31' E.
1905. *P. d.*, Alcock, Catal. Indian Decap. Crust., pt. 2, fasc. 1, p. 172.

\* PARAPAGURUS BOUVIERI, n. sp.

Plate XLIII.

The present species is distinguished from *P. dimorphus* by the very different chelipeds of both male and female. From *P. pilosimanus*, S. I. Smith, with which A. Milne-Edwards and Bouvier unite Henderson's *P. abyssorum*, it is distinguished by the eyes, which have both the base of the eye-stalk and the cornea dilated. In the latter respect it agrees with *P. affinis*, Henderson, but there the base of the eye-stalk is not dilated, and the ophthalmic scale terminates in from four to six denticles, instead of a simple subacute apex, as in the other two species. The base of the eye-stalk, but not the cornea, is somewhat dilated in the species or variety *P. abyssorum*. Milne-Edwards and Bouvier speak of the first antennæ in *P. pilosimanus* as having a four-jointed peduncle, but I think they have been led by the two or three projecting points of the basal joint into fancying a division where there was only an integumentary fold. In the present species the eye does not quite reach the base of the long third joint, which carries a finely tapering, setose flagellum of about 24 articulations, with a slender secondary of eight or nine. The setose acicle of the second antennæ does not reach beyond the peduncle, with the spinules of its inner margin only visible at a particular angle; the flagellum is very long and slender.

The third maxillipeds have the third joint longer than the fourth, its straight inner margin bordered with 14 spines.

The chelipeds do not show any great divergence from those described for the evidently somewhat variable *P. pilosimanus*. The fifth and sixth joints are covered with a velvety pubescence, leaving more or less bare the short thumb, to which the finger follows suit, neither showing a corneous tip. The second and third peræopods are also in close agreement with those of the primary species, both elongate, but the second notably shorter than the third. It seems to me that in this species, contrary to what is said to be the custom in the genus, the genital opening is discernible in the basal joint of the third peræopods on the right side as well as on the left. The short fourth peræopods have the padded border closely set with plumose setæ, but so feebly produced as to give but little holdfast to

the excavate setulose inner border of the small obtuse finger. Still less apparently can there be any grasping power between the blunt apex of the sixth joint and the stumpy pyramidal finger in the fifth peræopods.

The first and second pairs of pleopods in the male are symmetrical, the second much wider apart than the first, and both differing from those figured for *P. pilosimanus* in being apically broader. The distal part of the second pair is beset with more or less curving spines.

The left uropod is very much larger than the right. The telson is nearly symmetrical, its arcuate distal margin having four widely spaced spines on the left, and five nearer together on the right. The pleon is unusually small in comparison with the fore part of the animal. The female specimen, considerably smaller than the male has its pleon encased in an *Epizoanthus* colony.

Both specimens have bladder-like organisms attached to the bases of some of their appendages. These additions to the animal's economy seem to be unusual.

The specimens, No. 153, were obtained by Dr. Gilchrist, Buffalo River, N.W.  $\frac{1}{2}$  W. 19 miles, from 549 m. depth.

The specific name is given out of respect to Prof. E. L. Bouvier, F.M.L.S.

#### GEN. ANAPAGURUS, Henderson.

1886. *Anapagurus*, Henderson, Trans. Nat. Hist. Soc., Glasgow, p. 27.

1905. A., Alcock, Catal. Indian Decap. Crust., pt. 2, fasc. 1, pp. 121, 186.

#### ANAPAGURUS PUSILLUS, Henderson.

1888. *Anapagurus pusillus*, Henderson, Challenger Anomura, Reports, vol. xxvii., p. 73, pl. 7, fig. 7.

"Simon's Bay, 18 fathoms [33 m.]. A male specimen, in a shell of *Trochus benzi*, Krauss. It is with some hesitation that this is referred to the present species, and subsequent investigation may show it to be distinct. The chelipedes and ambulatory limbs are more hairy, and the dactyli of the latter are ciliated and slightly longer on the right side; the hand of the right chelipede is more strongly granulated, and a distinct finely tubercular line is present near the outer border. In other respects it agrees with *Anapagurus pusillus*."



## GEN. PYLOPAGURUS, A. Milne-Edwards and Bouvier.

1891. *Pylopagurus*, A. M.-Edw. and Bouvier, Bull. Soc. Philom., Paris, Ser. 8, vol. iii., p. 108.  
1905. *P.*, Alcock, Catal. Indian Decap. Crust., pt. 2, fasc. 1, p. 189.

## PYLOPAGURUS UNGULATUS (Studer).

1883. *Eupagurus unguatus*, Studer, Abhandl. k. Ak. Wiss. Berlin, 1882, p. 26, pl. 2, figs. 13, *a*, *b*, *c*.

"One specimen was found at the entrance to Table Bay, Cape of Good Hope, in 50 fathoms [94 m.] depth. The animal occupies the shell of a *Fusus*; this is so completely invested by a red *Eschara*, that about the mouth of the mollusc only a little oval opening is left, which can be completely closed by the seal-like hand of the crustacean's right cheliped."

1893. *Pylopagurus u.*, A. M.-Edw. and Bouvier, Mem. Mus. Comp. Zoöl., Harvard, vol. xiv., No. 3, p. 80, pl. 6, figs. 15-18.

The authors, however, point out several features in which their species from the Yucatan Bank differs from Studer's South African specimen.

## FAMILY CÆNOBITIDÆ.

1888. *Cænobitidæ*, Henderson, Challenger Anomura, Reports, vol. xxvii., p. 49.

Dana, Stimpson, and Haswell use the form *Cenobitidæ*, which, as will be presently explained, is incorrect.

1905. *C.*, Alcock, Catal. Indian Decap. Crust., pt. 2, fasc. 1, pp. 138, 192.

## GEN. CÆNOBITA, Latreille.

1829. *Cænobita*, Latreille, Règne Animal, vol. iv., p. 77.

Already in 1825 Latreille, Familles naturelles du Règne Animal, p. 276, defined this genus, and on p. 277 gave its name in French as Cénobite, but he did not supply the scientific version of that name, *Cænobita*, till 1829. Subsequently Milne-Edwards, Dana, and others used the form *Cenobita*, which is a mongrel between Latreille's French and Latin denominations.

## CÆNOBITA RUGOSUS (Milne-Edwards).

1837. *Cenobita rugosa*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 241.

1843. *C. r.*, Krauss, Südafrik. Crust., p. 58.

Krauss says: "I only found a single specimen on the rocky coast of Natal in a shell of *Tritonium dolarium*, LAMR. Its whole length amounts to about 2 inches."

1888. *Cænobita r.*, Henderson, Challenger Anomura, vol. xxvii., p. 51.

1905. *C. rugosus*, Alcock, Catal. Indian Decap. Crust., pt. 2, fasc. 1, pp. 143, 192, pl. 14, figs. 3, 3a.

In 1902 de Man, Abhandl. Senckenberg. Gesellschaft, vo. xxv., pt. 3, p. 742, pl. 24, fig. 45, adopts the name "*Cænobita compressus*, Guérin," on Bouvier's authority. But Milne-Edwards, *loc. cit.*, gives *C. compressa* after *C. rugosa*, only as a manuscript name assigned by Guérin, which would therefore be without authority.

## GEN. GLAUCOTHOE, Milne-Edwards.

1830. *Glaucothoe*, Milne-Edwards, Ann. Sci. Nat., vol. xix., p. 334.

1891. *G.*, Bouvier, Ann. Sci. Nat., Ser. 7, vol. xii., p. 65.

1906. *G.*, Alcock, Catal. Indian Decap. Crust., pt. 2, Anomura, fasc. 1, p. 22.

This is now generally accepted as a genus embracing larval forms of various Pagurids.

## \* GLAUCOTHOE, sp.

1910. *Glaucothoe*, sp., S.A. Crustacea, pt. 5.

No. 103, sent by Dr. Gilchrist, from Lion's Head, S. 72 E. 47 miles. Depth 174 m.

## TRIBE GALATHEIDEA.

1888. *Galatheaidea*, Henderson, Challenger Anomura, Reports, vol. xxvii., p. 103.

1901. *G.*, Alcock, Catal. Indian Decap. Macrura and Anomala, p. 235.

## FAMILY PORCELLANIDÆ.

1888. *Porcellanidæ*, Henderson, Challenger Anomura, Reports, vol. xxvii., p. 104.

1902. *P.*, Stebbing, S.A. Crustacea, pt. 2, p. 27.

## GEN. PORCELLANA, Lamarck.

1801. *Porcellana*, Lamarck, Syst. Anim. sans Vertèbres, p. 153.

1902. *P.*, Stebbing, S.A. Crustacea, pt. 2, p. 28.

## \* PORCELLANA DEHAANII, Krauss.

1843. *Porcellana dehaanii*, Krauss, Südafrik. Crust., p. 59, pl. 4, fig. 2.

“Very frequent in the sinuosities of *Eschara foliacea* L., on the terraces of the Natal coast.”

1858. *P. dehaanii*, Stimpson, Pr. Ac. Sci. Philad., vol. x., pp. 229, 243 (67, 81), and *P. streptocheles*, Stimpson, *ibid.*

Simon's Bay, 11–22 m.

1888. *P. s.*, Henderson, Challenger Anomura, Reports, vol. xxvii., p. 110.

Simon's Bay, 9–33 m.

1902. *P. dehaanii*, Stebbing, S.A. Crustacea, pt. 2, p. 28.

No. 8, sent by Dr. Gilchrist, from False Bay.

1907. *P. streptocheles*, Stimpson, Smithson. Misc. Coll., vol. xlix., p. 191, pl. 23, fig. 1.

Stimpson says: “This species is common in from six to twelve fathoms on sandy bottoms in Simon's Bay, Cape of Good Hope. It differs from *P. dehaanii*, Krauss, also from the Cape, in its naked carapace, broader front, with a less prominent median tooth, and non-denticulated superantennary margin.” It is not clear whether Stimpson means that he had himself found *P. dehaanii* at the Cape, or whether he is only referring to Krauss's Natal coast specimens. The recently published figure of Stimpson's species certainly differs in appearance from Krauss's figure, but specimens, taken at low tide in False Bay by C. F. Beyers, show variation in the central rostral tooth, and in the prominence or evanescence of the two or three teeth on the inner margin of the wrist of the chelipeds, making it very doubtful whether Stimpson's species can be distinguished from that of Krauss. There is no doubt that the specimens from False Bay are the species described and figured by Stimpson.

## GEN. PACHYCHELES, Stimpson.

1858. *Pachycheles*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 228 (66).

1888. *P.*, Henderson, Challenger Anomura, Reports, vol. xxvii., p. 113.

1897. *P.*, Ortmann, Zool. Jahrb., vol. x., p. 290

## PACHYCHELES NATALENSIS (Krauss).

1843. *Porcellana natalensis*, Krauss, Südafrik. Crust., p. 58, pl. 4, fig. 1.

"Very frequent in the sinuosities of *Eschara foliacea* L. on the Madrepore banks of the Natal coast."

1858. *Pachycheles n.*, Stimpson, Pr. Ac. Sci. Philad., vol. x., p. 228 (66).  
 1875. *Pisosoma n.*, Paulson, Red Sea Crustacea, p. 88, pl. 11, fig. 5.  
 1897. *Pachycheles sculptus*, Ortmann, Zool. Jahrb., vol. x., pp. 291, 294.  
 1902. *P. natalensis*, de Man, Abhandl. Senckenberg. Gesellschaft, vol. xxv., pt. 3, p. 701.

Ortmann and de Man are not agreed on the identification of this species. Dana in 1852, U.S. Expl. Exp., vol. xiii., p. 415, suggested that it might be the species which Guérin in 1838 (and earlier in 1835, *see* Ortmann) named *Porcellana grossimana*. But Ortmann in 1892, 1894, and 1897 identifies it with *Porcellana sculpta*, Milne-Edwards, 1837. In 1902 de Man remains unconvinced by Ortmann, and for the time continues to regard *natalensis* as distinct from *sculptus*.

## FAMILY GALATHEIDÆ.

1853. *Galatheidæ*, Dana, U.S. Expl. Exp., vol. xiii., p. 1431.  
 1901. *G.*, Alcock, Catal. Indian Decap. Macrura and Anomala, p. 236.  
 1902. *G.*, Stebbing, S.A. Crustacea, pt. 2, p. 29.  
 1902. *G.*, Benedict, Pr. U.S. Nat. Mus., vol. xxvi., p. 243.

## GEN. GALATHEA, Fabricius.

1793. *Galathea*, Fabricius, Entomologia Systematica, vol. ii., p. 472.  
 1888. *G.*, Henderson, Challenger Anomura, Reports, vol. xxvii., p. 117.  
 1902. *G.*, Benedict, Pr. U.S. Nat. Mus., vol. xxvi., pp. 246, 300.

## GALATHEA LABIDOLEPTA, Stimpson.

1858. *Galathea labidolepta*, Stimpson, Pr. Ac. Sci. Philad., vol. x., December, pp. 238, 251 (76, 89).  
 At Cape of Good Hope.



1888. *G. l.*? Henderson, Challenger Anomura, Reports, vol. xxvii., p. 120, pl. 12, figs. 6, 6a.

After describing *Galathea dispersa*, Bate, 1859, from British specimens, and stating that he cannot find any points of difference in the Challenger examples, Henderson continues: "Two species of *Galathea* were taken in Simon's Bay, South Africa, at a depth of 5 to 18 fathoms, from which locality the type of *Galathea labidolepta*, Stimpson, was procured. The first of these, represented by a single male specimen (figured twice the natural size on pl. xii.), which I refer with considerable hesitation to Stimpson's species, is either very closely allied to or identical with *Galathea dispersa*. The second species, represented by three imperfect specimens, is of much smaller size, the body of a male measuring 17.5 mm. in length, while a female with ova measures only 11 mm. In these the merus of the external maxillipedes is considerably longer and narrower than the ischium (a character in which it agrees with the common European *Galathea squamifera*, Leach), the inner margin bears two acute spinules near its distal end, and a few minute spinules are present on the outer margin. The chelipedes in the single specimen in which they are still present (a female) are very slender, and the fingers exceed the palm in length. It is impossible to say which of these species, or indeed whether either of them, is referable to *Galathea labidolepta*. The original description of the latter is very incomplete and the size is not recorded; the brief diagnosis would indeed apply to either of the Challenger species in most respects, but as regards the external maxillipedes, in the form of which they differ to a marked extent, Stimpson has furnished no account."

1907. *G. l.*, Stimpson, Smithson. Misc. Coll., vol. xlix., p. 231.

In this posthumous account Stimpson still gives no description of the third maxillipeds, but says: "The dimensions of a male specimen are: Length of the carapax, 0.32; breadth, 0.21; length of rostrum, 0.11; of chelipeds, 0.58 inch. Females are generally larger, the carapax in one being 0.4 inch in length." Bonnier's largest specimen of *Galathea dispersa* measured at full stretch from front to apex 39 mm., of which the carapace took 20 mm., four-fifths of an inch as compared with only two-fifths in Stimpson's species, which was "dredged from a sandy bottom in twelve fathoms in Simon's Bay, Cape of Good Hope."

## GALATHEA DISPERSA, Bate.

1858. *Galathea dispersa*, Bate, Journ. of Proc. Linn. Soc., London, vol. iii. (1859), No. 9, Aug. 20, 1858, p. 3.
1888. *G. d.*, Henderson, Challenger Anomura, Reports, vol. xxvii., p. 119, pl. 12, figs. 6, 6a.
- Simon's Bay. As Bate's name was published in August, 1858, and Stimpson's not till December of the same year, should the two species prove to be identical, Bate's *dispersa* will have the claim of priority. But from the disparity in the sizes mentioned above, it is probable that they are distinct.
1888. *G. d.*, Bonnier, Bull. Sci. France-Belgique, ser. 3, vol. i., Nos. 4-8, p. 68, pl. 13, figs. 1-3.

## GEN. MUNIDA, Leach.

1820. *Munida*, Leach, Dict. Sci. Nat., vol. xviii., p. 52.
1902. *M.*, Benedict, Pr. U.S. Mus., vol. xxvi., pp. 251, 305.
1902. *M.*, Stebbing, S.A. Crustacea, pt. 2, p. 29.

## \* MUNIDA SANCTI-PAULI, Henderson.

1885. *Munida sancti-pauli*, Henderson, Ann. Nat. Hist., ser. 5, vol. xvi., p. 411.
1888. *M. s.*, Henderson, Challenger Anomura, Reports, vol. xxvii., p. 142, pl. 3, fig. 6.
1902. *M. s.*, Benedict, Pr. U.S. Mus. vol. xxvi., pp. 251, 312.
1902. *M. s.*, Stebbing, S.A. Crustacea, pt. 2, p. 30.
- No. 144, specimen sent by Dr. Gilchrist, from Buffalo River north 10 miles; depth 567 m. There is some doubt whether this species should not be united with *M. militaris*, Henderson, which has page-precedence. But Benedict, in his review of the genus, keeps them separate.

## GEN. GALACANTHA, A. Milne-Edwards.

1880. *Galacantha*, A. Milne-Edwards, Bull. Mus. Comp. Zool., Harvard, vol. viii., p. 52.
1908. *G.*, Stebbing, S.A. Crustacea, pt. 4, p. 19.

## \* GALACANTHA ROSTRATA, A. Milne-Edwards.

1880. *Galacantha rostrata*, A. Milne-Edwards, Bull. Mus. Comp. Zool., vol. viii., p. 52.

1908. *G. r.*, Stebbing, S.A. Crustacea, pt. 4, p. 20.  
No. 176, specimen sent by Dr. Gilchrist, from Cape Point,  
NE. by E.  $\frac{1}{4}$  E., 46 miles; depth about 1,646 m.

### FAMILY UROPTYCHIDÆ.

1901. *Uroptychidæ*, Alcock, Catal. Indian Decap. Macrura and  
Anomala, p. 278.  
1902. *U.*, Stebbing, S.A. Crustacea, pt. 2, p. 31.

### GEN. UROPTYCHUS, Henderson.

1888. *Uroptychus*, Henderson, Challenger Anomura, Reports,  
vol. xxvii., p. 173.  
1902. *U.*, Stebbing, S.A. Crustacea, pt. 2, p. 32.  
1902. *U.*, Benedict, Pr. U.S. Mus., vol. xxvi., pp. 292, 330.

### \* UROPTYCHUS NITIDUS (A. Milne-Edwards).

1880. *Diptychus nitidus*, A. M.-Edw., Bull. Mus. Comp. Zoöl.  
vol. viii., p. 62.  
1902. *U. n.*, Stebbing, S.A. Crustacea, pt. 2, p. 32.  
No. 146, specimens sent by Dr. Gilchrist, from Cape Natal  
N. by E. (approx.) 24 miles; depth 804 m.

### TRIBE HIPPIDEA.

1849. *Hippidea*, de Haan, Crustacea Japonica, decas septima, p. 200,  
and Præfatio, p. xxii.  
1852. *H.*, Dana, U.S. Expl. Exp., vol. xiii., p. 404.  
1907. *H.*, Borradaile, Ann. Nat. Hist., ser. 7, vol. xix., p. 475.

### FAMILY HIPPIDÆ.

1858. *Hippidæ*, Stimpson, Pr. Ac. Sci., Philad., vol. x., p. 229 (67).  
1886. *H.*, Henderson, Challenger Anomura, Reports, vol. xxvii., p. 37.  
1900. *H.* Rathbun, Pr. U.S. Mus., vol. xxii., p. 300.

Miss Rathbun here explains that Fabricius in 1787 established the genus with five species, but of these in 1798 he left in it only the species *Hippa adactyla*. Later Latreille made this species the type of his genus *Remipes*, under the name *R. testudinarius*, with the result that *Remipes* must be regarded as a synonym of *Hippa*. Fabricius, however, in 1798 added *Cancer emeritus*, Linn., to keep company with

his *Hippa adactyla*. But, as they are now considered generically distinct, the species *emeritus* has to find a new generic name. This appears to be supplied by an entry in Sherborn's Index Animalium, p. 327, 1902.

#### GEN. EMERITA, Meuschen.

1778. *Emerita*, Meuschen, Mus. Gronovianum, p. 87 (Sherborn).

This name was accepted by Benedict, Bull. U.S. Fish. Comm. for 1900, vol. ii., p. 138, but attributed to Gronovius, and with this attribution Miss Rathbun appears to agree, only correcting the Gronovian date from 1763 to 1764 (Proc. Biol. Soc., Washington, vol. xvii., p. 171, 1904). I am not in accord with these esteemed carcinologists in regarding Gronovius as any authority for Linnean nomenclature, but the intervention of Meuschen allows me to follow them in using the name *Emerita*.

#### EMERITA EMERITUS (Linn.).

1767. *Cancer emeritus*, Linn., Systema Naturæ, ed. 12, p. 1055.  
 1778. *Astacus emeritus*, Fabricius, Systema Entomologiæ, p. 416.  
 1778. *Emerita e.*, Meuschen, Mus. Gronov., p. 87.  
 1791. *Cancer e.*, Herbst, Krabben und Krebse, vol. ii., pt. 1, p. 8, pl. 22, fig. 3 (not 4 as stated in text).  
 1798. *Hippa e.*, Fabricius, Suppl. Ent. Syst., p. 370.  
 1837. *Hippa emerita*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 209, the footnote including a reference to the undated Règne Animal, éd. 3, Crust., pl. 42, fig. 2, *a-i*. The footnote wrongly attributes *Hippa emerita* to Fabricius, instead of *Hippa emeritus*.  
 1852. *H. e.*, Dana, U.S. Expl. Exp., vol. xiii., p. 409, pl. 25, fig. 9 *a-c*.  
 1910. *Emerita emeritus*, Stebbing, S.A. Crustacea, pt. 5.  
 A specimen sent by Mr. Quekett, from the Durban Museum, has a carapace measuring 30 mm. in length from the central tooth of the tridentate front to the hind margin.

#### MACRURA GENUINA.

1901. *Macrura*, Alcock, Catal. Indian Deep-sea Decap. *Macrura* and *Anomala*, p. 8.  
 In Borradaile's classification, Ann. Nat. Hist., Ser. 7, vol. xix., p. 457, 1907, which Calman accepts in the Crustacea of Lankester's



Treatise on Zoology, pt. 7, fasc. 3, 1909, the Anomura include the tribe Thalassinidea in addition to the Galatheidea, Paguridea, and Hippidea here assigned to the Macrura anomala. However sound the arguments may be for this combination, the term Anomura, implying unsymmetrical tails, is scarcely admissible for a group in which three tribes out of four have the pleon symmetrical.

### TRIBE THALASSINIDEA.

1893. *Thalassinidea*, Stebbing, History of Crustacea, Internat. Sci. Ser., vol. lxxiv., p. 180.  
1903. *T.*, Borradaile, Ann. Nat. Hist., Ser. 7, vol. xii., p. 534.  
1907. *T.*, Borradaile, Ann. Nat. Hist., Ser. 7, vol. xix., p. 475.

### FAMILY AXIIDÆ.

1888. *Axiidæ*, Bate, Challenger Macrura, Reports, vol. xxiv., p. 36.  
Bate places the genus *Calocaris* in his family Thaumastochelidæ.  
1901. *A.*, Alcock, Catal. Indian Deep-sea Macrura, p. 186.  
1903. *A.*, Borradaile, Ann. Nat. Hist., Ser. 7, vol. xii., p. 536.  
1906. *A.*, Rathbun, Bull. U.S. Fish Comm. for 1903, pt. 3, p. 893.

### GEN. CALASTACUS, Faxon.

1893. *Calastacus*, Faxon, Bull. Mus. Comp. Zoöl., Harvard, vol. xxiv., p. 194.  
1895. *C.*, Faxon, Mem. Mus. Comp. Zoöl., vol. xviii., p. 105.  
1901. *C.*, Alcock, Catal. Indian Deep-sea Macrura, p. 191.  
1902. *C.*, Rathbun, Pr. U.S. Mus., vol. xxiv., p. 887, and (undated) Harriman Exp., vol. x., p. 150.  
1903. *C.*, Borradaile, Ann. Nat. Hist., Ser. 7, vol. xii., p. 539.  
Borradaile and others regard *Calastacus* as a subgenus of *Calocaris*, Bell, 1853.

#### \* CALASTACUS LONGISPINIS, McArdle.

1901. *Calastacus longispinis*, McArdle, Ann. Nat. Hist., Ser. 7, vol. viii., p. 522.  
McArdle's specimen was dredged in the Arabian Sea from a depth of 300 fathoms. His description includes the following

points: "The rostrum is acutely triangular and short, about one-fourth the length of the remainder of the carapace. A slight but well-marked median carina runs backwards for about two-thirds of the way to the cervical groove, and carries a single blunt spine near its beginning. The margins of the rostrum are spinous, having five teeth on either side in its free portion and two more on their continuation backwards as ridges over the carapace, where they extend as far as the level of the termination of the median carina, enclosing a horseshoe-shaped space. The gastric area supports three small spines on either side arranged in a longitudinal row, midway between the median carina and the continuation of the rostral margins." He also mentions that the telson has a couple of minute spines along the outer border.

1902. *C. l.*, McArdle, Illustrations Zool. R.C.M.S. Investigator, pl. 57, figs. 2, 2a.

1905. *C. l.*, MacGilchrist, Ann. Nat. Hist., Ser. 7, vol. xv., p. 239.

Captain MacGilchrist describes another female specimen, more complete and larger; carapace with rostrum 16.6 mm. long, pleon 27 mm., trawled in the Gulf of Oman, between 700 and 689 fathoms. In this "The median carina running backwards from the rostrum carries a large procurved acute spine in the anterior part of the gastric region." "The margin of the rostrum has 4 or 5 spinelets in front of a basal spine on either side of its free portion, and on the continuation backwards of the rostral margin on each side the spines vary from 2 to 4, and may display a want of symmetry in number and position on the two sides of the same specimen. The spines lying between these and the median carina similarly vary from 2 to 3 in number." "The telson has a fair-sized terminal spine with an upcurved tip."

1910. *C. l.*, Stebbing, S.A. Crustacea, pt. 5.

No. 71 was obtained by Dr. Gilchrist from a depth of 250 fathoms, 457 m., Table Mountain N. 79 E. 40 miles. In this specimen the median carina carries no tooth either blunt or acute, the very acute rostrum has four denticles on either side, not quite symmetrically arranged, and these are followed by five teeth on the left and four on the right side of the horseshoe arrangement on the carapace, between these sets and the median carina a line of two teeth occurring on each side, with the hinder tooth on the left poorly developed. The telson has a little straight tooth in the small median emargi-

nation of its convex distal border. As the species shows itself variable even in the two halves of the same specimen, the differences here noted do not seem to demand a distinctive name.

### FAMILY CALLIANASSIDÆ.

1888. *Callianassidæ*, Bate, Challenger Macrura, Reports, vol. xxiv., p. 27.  
 1893. *C.*, Stebbing, History of Crustacea, p. 183.  
 1901. *C.*, Alcock, Catal. Indian Deep-sea Macrura, p. 197.  
 1903. *C.*, Borradaile, Ann. Nat. Hist., Ser. 7, vol. xii., p. 541.  
 1906. *C.*, Rathbun, Bull. U.S. Fish Comm. for 1903, pt. 3, p. 892.

#### GEN. CALLICHIRUS, Stimpson.

1866. *Callichirus*, Stimpson, Proc. Chicago Acad. Sciences, vol. i., p. 47.  
 1874. *C.*, Stimpson, Annals of Lyceum of New York, vol. x., p. 122.  
 1903. *C.*, Borradaile, Ann. Nat. Hist., Ser. 7, vol. xii., p. 546.  
 Borradaile regards this as a subgenus of *Callianassa*, assigning to it nineteen species.

#### \* CALLICHIRUS KRAUSSI (Stebbing).

1900. *Callianassa kraussi*, Stebbing, S.A. Crustacea, pt. 1, p. 39, pls. 2, 3.  
 No. 41, specimens sent by Dr. Gilchrist, taken a little below high-water mark in Gordon's Bay, Cape of Good Hope. It has been sent me also from Gordon's Bay by C. F. Kies, Esq.  
 1903. *Callichirus k.*, Borradaile, Ann. Nat. Hist., Ser. 7, vol. xii., p. 547.

#### GEN. CALLIACTITES, Borradaile.

1903. *Calliactites*, Borradaile, Ann. Nat. Hist., Ser. 7, vol. xii., p. 545.  
 This also is regarded by Borradaile as a subgenus of *Callianassa*, and he assigns to it six species.

#### \* CALLIACTITES ROTUNDICAUDATUS (Stebbing).

1902. *Callianassa rotundicaudata*, Stebbing, S.A. Crustacea, pt. 2 p. 41, pl. 8.  
 No. 87 was obtained by Dr. Gilchrist from St. Francis Bay

lat.  $34^{\circ} 2' 45''$  S., long.  $25^{\circ} 10' 00''$  E., between 55 and 62 m. depth.

1903. *Calliactites* r., Borradaile, Ann. Nat. Hist., Ser. 7, vol. xii., p. 545.

GEN. UPOGEBIA, Leach.

1813. *Upogebia*, Leach, Edinb. Encycl., vol. vii., p. 400.  
 1893. *U.*, Stebbing, History of Crustacea, p. 185.  
 1900. *U.*, Stebbing, S.A. Crustacea, pt. 1, p. 42.  
 1903. *U.*, Borradaile, Ann. Nat. Hist., Ser. 7, vol. xii., p. 542.

\* UPOGEBIA CAPENSIS (Krauss).

1843. *Gebia major*, var. *capensis*, Krauss, Südafrik. Crust., p. 54.  
 "Frequent in Table Bay."

1891. *G. capensis*, Ortmann, Zool. Jahrb., vol. vi., p. 54.

1900. *Upogebia* c., Stebbing, S.A. Crustacea, pt. 1, p. 45.

No. 4, specimens sent by Dr. Gilchrist, from Swartkops River, Algoa Bay. It has also been sent me from Gordon's Bay, False Bay, by C. F. Kies, Esq. Dr. Gilchrist states that it is very abundant in some of the "Vleis," or salt-water lakes of Cape Colony.

1903. *U. c.*, Borradaile, Ann. Nat. Hist., Ser. 7, vol. xii., p. 543.

Borradaile says: The fact that "this species has gills on the last pair of legs will probably make it needful to separate it as a subgenus with such others as may share the character."

UPOGEBIA SUBSPINOSA (Stimpson).

1860. *Gebia subspinosa*, Stimpson, Pr. Ac. Sci. Philad., vol. xii., p. 22 (91).

In Simon's Bay, at the Cape of Good Hope, from 15 m. depth. It is stated that the feet of the first, second, and third pairs are armed with a sharp spine near the base. No trace of such a spine is apparent in the preceding species. But a specimen about 8 mm. long, sent me by Mr. C. F. Beyers, Esq., which I should otherwise have assigned to *U. capensis*, does show such a spine on the limbs mentioned, and may therefore be the young of *U. subspinosa*.

GEN. CALLIADNE, Strahl.

1861. *Calliadne*, Strahl, M. B. Akad. Berlin, p. 1064.

1868. *Gebiopsis*, A. Milne-Edwards, Nouv. Arch. Mus. Hist. Nat. Paris, vol. iv., p. 64.



1893. *Gebia* (*Gebiopsis*), Ortmann, Decap. der Plankton-Exp., vol. ii. p. 49.  
 1900. *Gebiopsis*, Stebbing, S.A. Crustacea, pt. 1, p. 43.  
 1907. *Calliadne*, Nobili, Bull. Sci. France-Belgique, vol. xl., p. 60.  
 1910. *Calliadne*, Borradaile, Trans. Linn. Soc., vol. xiii., pt. 2, p. 262.  
 It must be left to the option of naturalists to regard this as an independent genus or a subgenus of *Upogebia*.

\* CALLIADNE SAVIGNY, Strahl.

1825. *Gebia stellata*, Audouin (not Montagu), Explic. Planches Égypt., p. 80, pl. 9, fig. 3 (Savigny), not pl. 10, fig. 3, as stated by Nobili.  
 1861. *Calliadne savignyi*, Strahl, M. B. Akad. Berlin, p. 1064.  
 1891. *Gebia isodactyla*, Ortmann, Zool. Jahrb., vol. vi., p. 55, pl. 1, fig. 9.  
 1893. *G. (Gebiopsis) i.*, Ortmann, Decap. Plankton-Exp., vol. ii., p. 50.  
 1907. *Upogebia (Calliadne) savigny* Nob li, Ann. Sci. Nat., Ser. 9, vol. iv., p. 98.

The late Dr. Nobili, to whose writings I owe the reference to Strahl, had one of Ortmann's specimens for comparison with his own, and convinced himself that Ortmann's species is identical with that figured by Savigny.

1900. *Calliadne s.*, Stebbing, S.A. Crustacea, pt. 5.

No. 85, sent by Dr. Gilchrist, from lat. 33° 9' 30" S., long. 28° 3' 00" E. Ortmann considers that *Gebiopsis* (now *Calliadne*) depends for distinction only on two characters, the equally long fingers of the first peræopods and the absence of that little tooth on the antero-lateral margin of the carapace which is present in *Upogebia*. So far our specimen agrees with Ortmann's. It has the triangular rostrum rather more extended than that shown in his figure, but in accord with his description it has the lateral furrows of the carapace tolerably straight, somewhat diverging backwards, the fourth and fifth joints of the first peræopods without teeth, and the fingers almost equally curved; the telson with two ridges parallel to the lateral margins. It cannot, however, be said that the peduncle of the inner antennæ is only about as long as the penultimate joint of the outer. There may, therefore, be some doubt as to its true specific position. The length is about 22 mm.

## TRIBE SCYLLARIDEA.

1893. *Scyllaridea*, Stebbing, History of Crustacea, p. 191.  
 1907. *S.*, Borradaile, Ann. Nat. Hist., Ser. 7, vol. xix., p. 407.  
 1908. *S.*, Stebbing, S.A. Crustacea, pt. 4, p. 28.

## FAMILY SCYLLARIDÆ.

1888. *Scyllaridæ*, Bate, Challenger Macrura, Reports, vol. xxiv., p. 57.  
 1901. *S.*, Alcock, Catal. Deep-sea Macrura, p. 179.  
 1908. *S.*, Stebbing, S.A. Crustacea, pt. 4, p. 28.

## GEN. SCYLLARIDES, Gill.

1898. *Scyllarides*, Gill, Science, New Ser., vol. vii., p. 98.  
 1901. *S.*, Rathbun, U.S. Fish Comm. for 1900, vol. ii., p. 97.  
 1908. *S.*, Stebbing, S.A. Crustacea, pt. 4, p. 29.

## \* SCYLLARIDES ELISABETHÆ (Ortmann).

1897. *Scyllarus elisabethæ*, Ortmann, Zool. Jahrb., vol. x., p. 270.  
 Cape: Port Elizabeth.  
 1908. *Scyllarides e.*, Stebbing, S.A. Crustacea, pt. 4, p. 30, pl. 30.  
 No. 29, specimens from the Durban Museum; No. 1396, from Dr. Gilchrist, obtained at a depth of 51 m., Cape St. Blaize, W.  $\frac{1}{4}$  N.  $5\frac{1}{2}$  miles; No. 254, at 36 m. depth, in St. Sebastian Bay. Dr. Péringuey, June, 1910, reports this species from Table Bay.

## GEN. IBACUS, Leach.

1815. *Ibacus*, Leach, Zoological Miscellany, vol. ii., p. 151.  
 1837. *I.* (part), Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 286.  
 1841. *I.* (subgenus 3), de Haan, Crustacea Japonica, decas quinta, p. 153.  
 1852. *I.*, Dana, U.S. Expl. Exp., vol. xiii., p. 517.  
 1880. *Ibachus*, Boas, Vid. Selsk. Skr., Ser. 6, pt. 1, pp. 87, 181 (65, 159).  
 1888. *Ibaccus*, Bate, Challenger Macrura, Reports, vol. xxiv., pp. 56, 57.  
 1893. *Ibacus*, Stebbing, History of Crustacea, p. 193.

## \* IBACUS VERDI (Bate).

1888. *Ibaccus verdi*, Bate, Challenger Macrura, Reports, vol. xxiv., p. 58, pl. 7, fig. 2, pl. 8.  
1893. *Ibacus v.*, Stebbing, History of Crustacea, p. 193.  
1910. *I. v.*, Stebbing, S.A. Crustacea, pt. 5.

No. 12962, taken by Dr. Gilchrist from 82 m. depth, Nahoon Point, NW. by W.  $5\frac{1}{2}$  miles, appears to be a young specimen of this species, with the four pairs of pleopods in a rudimentary condition, very similar to those figured by Bate for his *Ibacus brevipes*. The second antennæ have on the distal joint a small tooth on the inner margin, followed by three large and four small teeth on the distal border. The other large joint has its outer margin cut into four very small teeth with a large one at the apex, and much of its anterior margin is finely denticulate. The carapace, measured from between the two bosses of the antennal segment to the middle of the convex hind margin, is 19 mm. in length; its greatest breadth, which is at the produced antero-lateral apices, is 31 mm. The front margin has seven denticles on the outer side of each eye. The central carina carries four blunt teeth. The lateral margin has only the produced apical tooth in front of the deep incision, but behind this it forms seven teeth successively smaller. The telson and uropods are papyraceous. It may be supposed that the number of denticles in different parts of the organism varies with the animal's growth. A phenomenon which has been observed in other crustaceans is exhibited in this specimen, namely, that the stomach turned inside out has been forced out of the mouth. The rapid hauling of creatures from depths at which they have been subject to high pressure is considered to be the cause of this explosive effect.

## FAMILY PALINURIDÆ.

1888. *Palinuridæ*, Bate, Challenger Macrura, Reports, vol. xxiv., p. 74.  
1902. *P.*, Stebbing, S.A. Crustacea, pt. 2, p. 37.  
1906. *P.*, Rathbun, Bull. U.S. Fish Comm. for 1903, pt. 3, p. 897.

## GEN. PALINURUS, Fabricius.

1798. *Palinurus*, Fabricius, Suppl. Ent. Syst., p. 400.  
1900. *P.*, Stebbing, S.A. Crustacea, pt. 1, p. 29.

\* *PALINURUS GILCHRISTI*, Stebbing.

1900. *Palinurus gilchristi*, Stebbing, S.A. Crustacea, pt. 1, p. 31,  
pl. 1.

No. 34, specimens obtained by Dr. Gilchrist, one in False Bay, another 25 miles SW.  $\frac{1}{4}$  W. from Cape St. Blaize.

GEN. *PANULIRUS*, White.

1847. *Panulirus*, White, List of Crust. in Brit. Mus., p. 69.  
1906. *P.*, Rathbun, Bull. U.S. Fish Comm. for 1903, pt. 3, p. 897.  
1908. *P.*, Stebbing, S.A. Crustacea, pt. 4, p. 33.

*PANULIRUS PENICILLATUS* (Olivier).

1791. *Astacus penicillatus*, Olivier, Encycl. Méth., vol. vi., p. 343.  
1906. *Panulirus p.*, Rathbun, Bull. U.S. Fish Comm. for 1903, p. 897.  
1908. *P. p.*, Stebbing, S.A. Crustacea, pt. 4, p. 33.

From Durban Museum, specimen probably taken on the Agulhas Bank.

\* *PANULIRUS BÜRGERI* (de Haan).

1841. *Palinurus bürgeri*, de Haan, Crustacea Japonica, decas quinta,  
pp. 157, 159, 238, pls. 43, 44, fig. 1.  
1897. *Panulirus b.*, Ortmann, Zool. Jahrb., vol. x., p. 263.  
1908. *P. b.*, Stebbing, S.A. Crustacea, pt. 4, p. 34.

No. 1052, a specimen sent by Dr. Gilchrist, from "Fishing ground, Algoa Bay." Another specimen was kindly forwarded to me from Port Elizabeth by F. W. FitzSimons, Esq., director of the Port Elizabeth Museum. Miss Rathbun, *loc. cit.*, 1906, points out the probably near relationship of *Panulirus marginatus* (Quoy and Gaimard), 1825, to de Haan's species, but there is no trustworthy evidence to show that the two names can be regarded as synonymous.

GEN. *JASUS*, Parker.

1883. *Jasus*, Parker, Nature, vol. xxix., p. 190.  
1900. *J.*, Stebbing, S.A. Crustacea, pt. 1, p. 30, and 1902, *ibid.*, pt. 2,  
p. 38.

\* *JASUS LALANDII* (Milne-Edwards).

1837. *Palinurus lalandii*, Milne-Edwards, Hist. Nat. Crust., vol. ii.,  
p. 293.



1843. *P. l.*, Krauss, Südafrik. Crust., p. 53.

Krauss says: "It occurs, so far as I know, only on the ground on the rocky coast of Table Bay, and is there very common."

1852. *P. l.*, Dana, U.S. Expl. Exp., vol. xiii., p. 519.

"Cape of Good Hope."

1888. *Palinostus l.*, Bate, Challenger Macrura, vol. xxiv., p. 86, pl. 11, fig. 1, pl. 12, fig. 1.

Bate says: "Two small specimens of what I believe to be the young of this species were taken from the screw of the Challenger the day after she left the Cape of Good Hope. The armature and ornamentation correspond with those of the adult. The specimen is about 25 mm. in length, and appears to be perfectly formed in all except its sexual characters."

1884. *Jasus l.*, Parker, Trans. New Zealand Inst. for 1883, p. 304.

1900. *Jasus l.*, Stebbing, S.A. Crustacea, pt. 1, p. 30, and 1902, *ibid.*, pt. 2, p. 38.

No. 160, sent by Dr. Gilchrist, from Hermanuspetrusfontein, Caledon District, near False Bay. A specimen, measuring 390 mm. in length of body, or nearly  $15\frac{1}{2}$  inches, has been sent me by Dr. Péringuey.

\* *JASUS PARKERI*, Stebbing.

1902. *Jasus parkeri*, Stebbing, S.A. Crustacea, pt. 2, p. 39, pl. 7.

No. 148, the specimen sent by Dr. Gilchrist, was taken in the shrimp trawl, Buffalo River north 15 miles, from a depth of 567 m.

GEN. *PHYLLOSOMA*, Leach.

1818. *Phyllosoma*, Leach, in Tuckey's Congo Exp., Appendix 4, p. 19, and Journal de Physique, p. 307.

1833. *P.*, Guérin, Magasin de Zoologie, cl. vii., unpagéd, and in Duperrey's Voy. de la Coquille, vol. ii., pt. 2, p. 43.

1837. *P.*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 472.

O. G. Costa, in his Crustacea of Naples, article Stomapodi (undated), discusses *Phyllosoma*, and criticises Risso.

1849. *P.*, de Haan, Crustacea Japonica, decas sexta, p. 226.

1863. *P.*, Claus, Zeitschr. für wiss. Zool., vol. xiii., p. 428, pl. 26, figs. 2, 3, 5, 6, and 1876, Untersuchungen genealog. des Crustaceen-Systems, p. 114.

1873. *P.*, Richters, Zeitschr. für wiss. Zool., vol. xxiii., pl. 31-34.

1888. *P.*, Bate, Challenger Macrura, vol. xxiv., pp. see index, p. 939.

1893. *P.*, Ortmann, Decap. und Schizop. Plankton-Exp., p. 88.

\* PHYLLOSOMA sp., Stebbing.

1910. *Phyllosoma* sp., Stebbing, S.A. Crustacea, pt. 5.

No. 64, a specimen sent by Dr. Gilchrist, was obtained off Lion's Head N. 63 E., 34 miles, depth of haul 282 m. This specimen in many respects resembles *Phyllosoma longipes*, Milne-Edwards, a species very inconveniently instituted by that author in the explanation of pl. 57, figs. 4, 4a-g, in the undated volume of the Crustacea, Règne Animal, ed. 3. As it is not included by M.-Edw. in his Hist. Nat. Crust., vol. ii., 1837, its date is evidently not earlier than that year. Our specimen agrees in the widely rounded cephalic buckler, with frontal projection carrying the long- and slenderly-stalked eyes, the first antennæ with their rather short primary and secondary flagella, and the second antennæ, fully three times as long as the first, with the peduncle simple, that is, not having any outstanding process. Far to the rear are seen the second and third maxillipeds, both with vesicles at the base, both very slender and the third pair very long. To these succeed five pairs of very long slender peræopods, also furnished with minute branchial vesicles, two sets to each of the first four, but a single one to the fifth. The first four pairs have a secondary branch ending in a natatory flagellum. The fifth pair has no secondary branch attached to the second joint, but has the following joint longer than in the other pairs. In *P. longipes* Milne-Edwards represents the fifth leg with a secondary branch, and the third joint not longer than in the preceding pairs. In the pleon the two specimens appear to agree, so far as there is ground for judging. In the new one, the tail-fan is exceedingly like that of an adult *Panulirus*; the four pairs of pleopods have two nearly equal rami, the inner ramus carrying a coupling-plate or *appendix interna*. In the female of *Jasus lalandii* the pleopods of the second segment are without this appendix, but it is strongly developed on the three following pairs. Claus in 1863, *loc. cit.*, p. 430, pl. 27, fig. 11, discusses a large specimen, in which the second antennæ are short, with outstanding process, and the last peræopods are short, but otherwise showing near agreement with our example. Claus suggests that his specimen may be a Scyllarid larva.

## TRIBE ERYONIDEA.

1837. "*Tribu des Eryons*," Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 278.  
 1841. *Eryonidea*, de Haan, Crustacea Japonica, decas quinta, p. 149.  
 1907. *E.*, Borradaile, Ann. Nat. Hist., Ser. 7, vol. xix., pp. 460, 474.  
 1909. *E.*, Calman, Crustacea, in Lankester's Treatise on Zoology, pt. 7, fasc. 3, p. 312.

## FAMILY ERYONIDÆ.

1852. *Eryonidæ*, Dana, U.S. Expl. Exp., vol. xiii., p. 515.  
 1902. *E.*, Stebbing, S.A. Crustacea, pt. 2, p. 35.  
 1907. *E.*, Borradaile, Ann. Nat. Hist., Ser. 7, vol. xix., p. 467.  
 1908. *E.*, Stebbing, S.A. Crustacea, pt. 4, p. 25.

## GEN. POLYCHELES, Heller.

1862. *Polycheles*, Heller, Sitzungsber. K. Akad. Wiss. Wien, vol. xlv., p. 389.  
 1902. *P.*, Stebbing, S.A. Crustacea, pt. 2, p. 35.

## \* POLYCHELES SCULPTUS, S. I. Smith.

1880. *Polycheles sculptus*, S. I. Smith, Proc. U.S. Mus. for 1879, p. 346, pl. 7.  
 1882. *P. s.*, Stebbing, S.A. Crustacea, pt. 2, p. 36.  
 No. 182, specimen sent by Dr. Gilchrist, from Cape Natal N. by E. (approx.) 24 miles; depth 805 m.

## \* POLYCHELES NANUS (S. I. Smith).

1884. *Pentacheles nanus*, Smith, Rep. U.S. Fish Comm. for 1882, p. 359.  
 1895. *Polycheles n.*, Faxon, Mem. Mus. Comp. Zoöl., Harvard, vol. xviii., p. 121, pl. 33, figs. 1, *a-b*.  
 1908. *P. n.*, Stebbing, S.A. Crustacea, pt. 4, p. 27.  
 No. 184, specimen sent by Dr. Gilchrist, from Cape Point Lighthouse N.E. by E.  $\frac{3}{4}$  E.  $38\frac{1}{2}$  miles; depth 1,372-1,463 m.

## \* POLYCHELES BEAUMONTII (?) (Alcock).

1894. *Pentacheles beaumontii*, Alcock, Ann. Nat. Hist., Ser. 6. vol. xiii., p. 236.

1895. *Polycheles b.*, Faxon, Mem. Mus. Comp. Zoöl., vol. xviii., p. 125.  
Faxon gives reason for supposing this to be a synonym of  
*Polycheles granulatus*, Faxon, 1893.
1908. *P. b.*, Stebbing, S.A. Crustacea, pt. 4, p. 25.  
Nos. 181, 182, 183, specimens sent by Dr. Gilchrist, the  
first station being Cape Point Lighthouse E.  $\frac{3}{4}$  N. 41 miles;  
depth 1,628 m.; the second with the same Point approx. NE.  
40 miles; depth 1,024–1,280 m.; the third with the Point  
NE. by E.  $\frac{1}{2}$  E. 43 miles; depth 1,646 m.

### TRIBE ASTACIDEA.

1888. *Astacidea* (part), Bate, Challenger Macrura, vol. xxiv., pp. 56,  
100.
1893. *A.* (part), Stebbing, History of Crustacea, p. 199.
1907. *Astacura*, Borradaile, Ann. Nat. Hist., Ser. 7, vol. xix., p. 475.

### FAMILY ASTACIDÆ.

1893. *Nephropsida*, Stebbing, History of Crustacea, p. 201.
1900. *N.*, Stebbing, S.A. Crustacea, pt. 1, p. 33, and 1902, *ibid.*, pt. 2,  
p. 33.

Though this family name has met with kindly acceptance  
by several authors, consistency now compels me to relinquish  
it, in conformity with the general principle that the earliest of  
included genera should determine the family name.

### GEN. ASTACUS, Borlase.

1758. *Astacus*, Borlase, Natural History of Cornwall, p. 274.
1819. *A.*, Leach, in Samouelle's Entomologist's Useful Compendium  
p. 95.
1836. *A.*, Westwood, The Entomologist's Text-book, p. 181.
1837. *Homarus*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 335.
1844. *Astacus*, O. G. Costa, Atti R. Accad. Scienze, vol. v., pt. 2, p. 72.
1900. *A.*, Stebbing, S.A. Crustacea, pt. 1, p. 33.

### \* ASTACUS CAPENSIS, Herbst.

1792. *Cancer (Astacus) capensis*, Herbst, Krabben und Krebse, vol. ii.,  
pt. 2, p. 49, pl. 26, fig. 1.  
"This beautiful Macruran lives at the Cape in such rivers  
as occur on the mountains."



1837. *Homarus c.*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 335.  
 1843. *H. c.*, Krauss, Südafrik. Crust., p. 54.  
 "In the mountain rivers of Cape land. I have never seen it in Natal."  
 1900. *Astacus c.*, Stebbing, S.A. Crustacea, pt. 1, p. 34 (error corrected, pt. 2, p. 83).

Nos. 9, 50, sent by Dr. Gilchrist, No. 9 from salt-water rock-pool at Sea Point, Table Bay, No. 50, a Museum specimen. Dr. Gilchrist says: "It is certainly a mistake to say that it occurs in the rivers of the Colony, where, so far as I can make out, no such Crustacean occurs. I have learned that it is also found in Algoa Bay."

#### GEN. NEPHROPSIS, Wood-Mason.

1873. *Nephropsis*, Wood-Mason, Journ. Asiat. Soc. Bengal, vol. xlii., pt. 2, p. 39, and Ann. Nat. Hist., Ser. 4, vol. xii., p. 59.  
 1902. *N.*, Stebbing, S.A. Crustacea, pt. 2, p. 33.

#### \*. NEPHROPSIS ATLANTICA, Norman.

1882. *Nephropsis atlantica*, Norman, Proc. R. Soc. Edin., vol. xi. p. 684.  
 1902. *N. a.*, Stebbing, S.A. Crustacea, pt. 2, p. 34.  
 No. 151, sent by Dr. Gilchrist, from Cape Natal N. by E. (approx.) 24 miles; depth 805 m.

#### TRIBE PENÆIDEA.

1888. *Penæidea*, Bate, Challenger Macrura, Reports, vol. xxiv., pp. 219, 220.  
 1893. *P.*, Stebbing, History of Crustacea, p. 213.  
 1906. *Peneidea*, Alcock, Catal. Indian Decap. Crust., pt. 3, fasc. 1, p. 4.

Alcock here supplies extensive references writings on this subject.

1908. *Penæidea*, Bouvier, Camp. Sci. Prince de Monaco, fasc. 33, p. 9.  
 1910. *P.*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910], p. 12.

#### FAMILY PENÆIDÆ.

1852. *Penæidæ* (part), Dana, U.S. Expl. Exp., vol. xiii., p. 600.  
 1888. *P.*, Bate, Challenger Macrura, Reports, vol. xxiv., p. 220.

1905. *P.*, Stebbing, S.A. Crustacea, pt. 3, p. 73.  
 1906. *Peneidæ*, Alcock, Catal. Indian Decap. Crust., pt. 3, fasc.1, p. 4.  
 1908. *Penæidæ*, Bouvier, Camp. Sci. Prince de Monaco, fasc. 33, p. 9, and (sub-fam.) *Penæinæ*, Bull. Inst. Océanogr. Monaco, No. 119, p. 1.  
 1909. *P.*, A. Milne-Edwards and Bouvier, Mem. Mus. Comp. Zoöl., Harvard, vol. xxvii., No. 3, p. 179.  
 1910. *P.*, Kemp, Fish., Ireland, Sci. Invest., 1908, I. [1910], p. 12.  
 The number of South African species belonging to this family may be expected to receive a considerable increase, when there has been time to classify them among the numerous genera of which the family now consists.

#### GEN. PENÆUS, J. C. Fabricius.

1798. *Penæus*, Fabricius, Suppl. Ent. Syst., p. 408.  
 1905. *P.*, Stebbing, S.A. Crustacea, pt. 3, p. 74.  
 1906. *Peneus*, Alcock, Catal. Indian Decap. Crust., pt. 3, fasc. 1, p. 4 (*Peneus*-group), p. 7 (*Peneus* restricted).

#### \* PENÆUS MONODON, Fabricius.

1798. *Penæus monodon*, Fabricius, Suppl. Ent. Syst., p. 408.  
 1905. *P. m.*, Stebbing, S.A. Crustacea, pt. 3, p. 74.  
 No. 157, a specimen from the Durban Museum. Another specimen, sent by Dr. Gilchrist, was taken near Port Elizabeth, Swartskop River.

#### \* PENÆUS CÆRULEUS, Stebbing.

1905. *Penæus cæruleus*, Stebbing, S.A. Crustacea, pt. 3, p. 77, pls. 21, 21 bis.  
 Nos. 51, 67, 67A, were sent by Dr. Gilchrist, from Nahoon River (tidal for several miles inland) on E. coast near East London. Dr. de Man deems this a colour variety of *P. semisulcatus*, de Haan.

#### FAMILY SERGESTIDÆ.

1852. *Sergestidæ*, Dana, U.S. Expl. Exp., vol. xiii., p. 601.  
 1905. *S.*, Stebbing, S.A. Crustacea, pt. 3, p. 80.

#### GEN. SERGESTES, Milne-Edwards.

1830. *Sergestes*, Milne-Edwards, Ann. Sci. Nat., vol. xix., p. 348.  
 1901. *S.*, Alcock, Catal. Indian Deep-sea Crust., p. 48.

1905. *S.*, Stebbing, S.A. Crustacea, pt. 3, p. 80.  
 1910. *S.*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910],  
 p. 24.

\* *SERGESTES ARCTICUS*, Kröyer.

1855. *Sergestes arcticus*, Kröyer, Oversigt K.D. Vid. Selsk. Forhandl.,  
 No. 1, p. 27.  
 1905. *S. a.*, Stebbing, S.A. Crustacea, pt. 3, p. 81.  
 Nos. 62, 62A, sent by Dr. Gilchrist, were taken off Table  
 Mountain E. by S. 40 miles, depth (probably) 549 m.  
 1908. *S. a.*, Hansen, Danish Ingolf Exp., Malacostraca, p. 82.  
 1910. *S. a.*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910],  
 p. 30, pl. 3, figs. 13-19.

\* *SERGESTES BISULCATUS*, Wood-Mason.

1891. *Sergestes bisulcatus*, Wood-Mason, Ann. Nat. Hist., Ser. 6,  
 vol. vii., p. 190; vol. viii., p. 353.  
 1905. *S. b.*, Stebbing, S.A. Crustacea, pt. 3, p. 87, pl. 24A.  
 No. 199, sent by Dr. Gilchrist, was obtained from Cape  
 Point E. by N. 29 miles; depth 457 to 549 m. The late Dr.  
 Nobili (1906, Bull. Sci. France-Belgique, vol. xl., p. 22 of sep.  
 copy) supposes that this South African form should rather be  
 identified with *Sergestes prehensilis*, Bate.

\* *SERGESTES GLORIOSUS*, Stebbing.

1905. *Sergestes gloriosus*, Stebbing, S.A. Crustacea, pt. 3, p. 84,  
 pls. 22, 23.  
 No. 145, sent by Dr. Gilchrist, was taken off Sandy Point,  
 approx. N.W. by W. 17 miles; depth 1,463 m. Sandy Point  
 is near the Great Kei River, Transkei.

TRIBE CARIDEA.

1852. *Caridea* (part), Dana, U.S. Expl. Exp., vol. xiii., p. 528.  
 1888. *Macrura normalia*, Bate, Challenger Macrura, Reports,  
 vol. xxiv., p. 480.  
 1893. *Caridea*, Stebbing, History of Crustacea, p. 224.  
 1910. *C.*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910],  
 p. 35.

In his useful synoptic view of ten families, Mr. Kemp places side  
 by side the Crangonidæ and Palæmonidæ as alike having the carpus

or fifth joint of the second peræopods unsegmented, simple, while that joint is divided into two or more segments in the Processidæ, Alpheidæ, Hippolytidæ, and Pandalidæ. Both these groups agree in having exopods usually entirely absent from the peræopods, or present only on the first pair. The Oplophoridæ and some other families are distinguished from the foregoing by having exopods on at least four pairs of peræopods.

### FAMILY CRANGONIDÆ.

1853. *Crangonidæ*, Bell, British Stalk-eyed Crustacea, p. 255.  
 1900. *C.*, Stebbing, S.A. Crustacea, pt. 1, p. 46.  
 1903. *C.*, Gurney, Proc. Zool. Soc., London, p. 24.  
 1905. *C.*, Stebbing, S.A. Crustacea, pt. 3, p. 92.  
 1910. *C.*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910], p. 134.

Here also a valuable synoptic view of the genera is supplied by Mr. Kemp.

### GEN. CRANGON, J. C. Fabricius.

1798. *Crangon*, Fabricius, Suppl. Ent. Syst., pp. 387-409.  
 1907. *C.*, Calman, National Antarctic Exp., Nat. Hist., vol. ii., Decapoda, p. 3.  
 1910. *C.*, Kemp, Fisheries, Ireland, Sci. Invest., I. [1908], pp. 135, 136.

The genus *Crangon* is to be attributed to Fabricius, not Linnæus. The latter author only used *crangon* as a specific name. As to the publication of the generic name *Crangon* by F. Weber in 1795, I have already expressed my opinion of its futility in the Journal of the Linnean Society, vol. xxix., p. 332, 1905.

### CRANGON CAPENSIS, Stimpson.

1860. *Crangon capensis*, Stimpson, Pr. Ac. Sci. Philad., p. 93 (24).

Taken in Simon's Bay, Cape of Good Hope, from a depth of 22 m. Length of specimen 22.5 mm. Dr. Calman (*loc. cit.*, p. 4) observes that "with the exception of the very imperfectly known *C. capensis*, Stimpson, from the Cape of Good Hope, *C. antarcticus* is the only species of the genus inhabiting the Southern Hemisphere."



GEN. *ÆGEON*, Kinahan.

1816. *Egeon* (preocc.) Risso, Hist. Nat. Crust. de Nice, p. 99.  
 1832. *E.*, Guérin-Ménéville, Exp. Sci. Morée, p. 33.  
 1862. *Ægeon*, Kinahan, Pr. Irish Ac., vol. viii., pt. 1, p. 5.  
 1900. *Æ.*, Stebbing, S.A. Crustacea, pt. 1, p. 49.  
 1910. *Æ.*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910],  
 pp. 135, 155.

\* *ÆGEON CATAPHRACTUS* (Olivi).

1792. *Cancer cataphractus*, Olivi, Zoologia adriatica, p. 50, pl. 3,  
 fig. 1.  
 1900. *Ægeon c.*, Stebbing, S.A. Crustacea, pt. 1, p. 50.  
 No. 43, sent by Dr. Gilchrist, obtained between Cove Rock  
 and Hood Point, near East London, lat. 33° 5' 45" S., long.  
 27° 52' 45" E.; depth 73 m.

GEN. *PONTOPHILUS*, Leach.

1817. *Pontophilus*, Leach, Malac. Podophth. Brit., text to pl. 37A.  
 1905. *P.*, Stebbing, S.A. Crustacea, pt. 3, p. 93.  
 1910. *P.*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910],  
 pp. 135, 159.

\* *PONTOPHILUS GRACILIS*, S. I. Smith.

1882. *Pontophilus gracilis*, Smith, Bull. Mus. Comp. Zoöl., Harvard,  
 vol. x., p. 36, pl. 7, figs. 2-3a.  
 1905. *P. g.*, Stebbing, S.A. Crustacea, pt. 3, p. 94, pl. 25.  
 No. 60, sent by Dr. Gilchrist, taken 40 miles off Table  
 Mountain, from a depth of 457 m.

FAMILY *PALÆMONIDÆ*.

1837. '*Palémoniens*,' Milne-Edwards, Hist. Nat. Crust., vol. ii.,  
 p. 367.  
 1849. *Palemonidea*, de Haan, Crust. Japonica, decas sexta, p. 169.  
 1852. *Palæmonidæ* (part), Dana, U.S. Expl. Exp., vol. xiii.,  
 p. 531.  
 1905. *P.*, Coutière, Ann. Sci. Nat., Ser. 8, vol. xii., p. 249.  
 1908. *P.*, Stebbing, S.A. Crustacea, pt. 4, p. 39.  
 1910. *P.*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910],  
 pp. 36, 127.

## GEN. PALÆMON, J. C. Fabricius.

1798. *Palæmon*, Fabricius, Suppl. Ent. Syst., pp. 378, 402.  
 1837. *Palemon*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 387.  
 1843. *Palæmon*, Krauss, Südafrik. Crust., p. 55.  
 1905. *P.*, Coutière, Ann. Sci. Nat., Ser. 8, vol. xii., p. 249.

## PALÆMON QUOIANUS, Milne-Edwards.

1837. *Palemon quoianus*, M.-Edw., Hist. Nat. Crust., vol. ii., p. 393.  
 1843. *Palæmon q.*, Krauss, Südafrik. Crust., p. 55.

Krauss states that above the rostrum has 8 teeth, of which the two outermost are scarcely visible, and below 3 teeth. He says that it is very frequent on the rocky coast of Natal in the holes filled with water during the ebb. The length of '1,35 lines,' as compared with the length of an inch assigned by Milne-Edwards to the specimen from New Zealand, would make Krauss's identification very doubtful, but, as he lays no stress on the minuteness, it is probable, or at least possible, that the length intended was 13,5 lines.

## GEN. EUPALÆMON, Ortmann.

1891. *Palæmon (Eupalæmon)*, Ortmann, Zool. Jahrb., vol. v., pp. 696, 697.  
 1905. *P. (Eu.)*, Coutière, Ann. Sci. Nat., Ser. 8, vol. xii., pp. 252, 266, 273, 287.  
 1908. *Eupalæmon*, Stebbing, S.A. Crustacea, pt. 4, p. 41.

## EUPALÆMON SUNDAICUS (Heller).

1863. *Palæmon sundaicus*, Heller, Sitzungsber. Ak. Wiss. Wien, vol. xlv., p. 415, pl. 2, figs. 38, 39.  
 1866. *P. s.*, Heller, Novara Crustacea, p. 115.  
 1892. *P. (Eupalæmon) s.*, de Man, in Weber's Zool. Ergebn. Niederl. Ost-Indien, vol. ii., p. 437, pl. 26, fig. 35.  
 1897. *P. s.*, Max Weber, Zool. Jahrb., vol. x., p. 165.  
     Inhabits the coast of Natal.  
 1904. *P. (Eupalæmon) s.*, de Man, Trans. Linn. Soc., Ser. 2, vol. ix., pt. 8, p. 306.  
 1905. *P. (Eupalæmon) s.*, Coutière, Ann. Sci. Nat., Ser. 8, vol. xii., pp. 250, 251, 273, pl. 14, figs. 44-46a.

Coutière and de Man cite Max Weber as authority for the occurrence of this species in Natal.

EUPALÆMON RUDIS (Heller).

1862. *Palæmon rudis*, Heller, Verh. Zool. bot. Gesell. Wien, p. 527.  
 1908. *P. (Eupalæmon) r.*, Coutière, Ann. Sci. Nat., Ser. 8, vol. xii., pp. 273, 288, pl. 12, figs. 23, 24.  
 1908. *Eupalæmon r.*, Stebbing, S.A. Crustacea, pt. 4, p. 41.  
 Specimens from Durban.

GEN. PARAPALÆMON, Ortmann.

1891. *Palæmon (Parapalæmon)*, Ortmann, Zool. Jahrb., vol. v., pp. 696, 731.  
 1905. *P. (P.)*, Coutière, Ann. Sci. Nat., Ser. 8, vol. xii., pp. 252, 266, 273.

PARAPALÆMON DOLICHODACTYLUS (Hilgendorf).

1878. *Palæmon dolichodactylus*, Hilgendorf, Monatsb. Akad. Berlin, p. 840, pl. 4, fig. 18.  
 1891. *P. (Parapalæmon) d.*, Ortmann, Zool. Jahrb., vol. v., pp. 731, 732.  
 1892. *P. (Macrobrachium) d.*, de Man, in Weber's Zool. Ergebn., vol. ii., p. 477.  
 1902. *P. (Parapalæmon) d.*, Coutière, Bull. Mus. d'Hist. Nat., No. 7, p. 516 (2).  
 1905. *P. (P.) d.*, Coutière, Ann. Sci. Nat., Ser. 8, vol. xii., pp. 273, 283.

Coutière gives Hilgendorf's authority for the statement that this species appears to be common in the watercourses of the East African coast, from Natal to Zanzibar.

PARAPALÆMON PETERSII (Hilgendorf).

1878. *Palæmon petersii*, Hilgendorf, Monatsb. Ak. Wiss. Berlin, p. 841, pl. 4, fig. 19.  
 1897. *P. (Parapalæmon) p.*, Max Weber, Zool. Jahrb., vol. x., p. 166.  
 From Natal.

GEN. MACROTEROCHEIR, Stebbing.

1891. *Palæmon (Macrobrachium)*, Ortmann, Zool. Jahrb., vol. v., pp. 696, 733.  
 1908. *Macroterocheir*, Stebbing, S.A. Crustacea, pt. 4, p. 39.

## MACROTEROCHEIR LEPIDACTYLUS (Hilgendorf).

1878. *Palæmon lepidactylus*, Hilgendorf, Monatsb. Akad. Berlin p. 838, pl. 4, figs. 14-16.  
 1905. *P. (Macrobrachium) l.*, Coutière, Ann. Sci. Nat., Ser. 8, vol. xii., p. 272, pl. 10, pl. 11, figs. 13, 13a.  
 1908. *Macroterocheir l.*, Stebbing, S.A. Crustacea, pt. 4, p. 40.  
 No. 155. From Barberton (Transvaal) and from Umgeni lagoon (Natal), specimens out of the Durban Museum.

## GEN. LEANDER, Desmarest.

1849. *Leander*, Desmarest, Ann. Ent. Soc. France, p. 87 (cited from Dana, U.S. Expl. Exp., vol. xiii., p. 535).  
 1892. *L.*, de Man, in Weber's Zool. Ergebn. Niederl. Ost-Indien, vol. ii., p. 506.  
 1905. *L.*, Coutière, Ann. Sci. Nat., Ser. 8, vol. xii., p. 336.  
 1910. *L.*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910], p. 127.

## \* LEANDER SQUILLA (Linn.).

1758. *Cancersquilla*, Linn., Systema Naturæ, ed. 10, p. 632.  
 1798. *Palæmon s.*, Fabricius, Suppl. Ent. Syst., p. 403.  
 1852. *P. s.*, Dana, U.S. Expl. Exp., vol. xiii., p. 586, pl. 38, fig. 9.  
 1853. *P. s.*, Bell, Brit. Stalk-eyed Crust., p. 305, fig. in text.  
 1893. *Leander s.*, Stebbing, History of Crustacea, p. 247.  
 1910. *L. s.*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910], p. 132, pl. 20, figs. 3, 3 a-c.  
 1910. *L. s.*, Stebbing, S.A. Crustacea, pt. 5.

A specimen sent by Dr. Gilchrist from Muizenberg, from a salt lake or "Vlei" in False Bay, appears to belong to this species. The rostrum has 8 teeth above and 4 below, exclusive of its bifid apex, in which the lower point projects beyond the upper. Of the upper teeth two are behind the eyes, belonging to the body of the carapace rather than the rostrum proper. All the teeth are followed by setules. The sides of the first pleon segment extend a little below those of the second. The lateral apices of the fifth segment are acute. The telson has three rather long apical spines and three latero-dorsal pairs of minute spines. The length of the specimen is about 44 mm.

## LEANDER CAPENSIS, Weber.

1897. *Leander capensis*, Max Weber, Zool. Jahrb., vol. x., p. 174, pl. 15, fig. 3.



## FAMILY PROCESSIDÆ.

1896. *Processidæ* (part), Ortmann, Zool. Jahrb., vol. ix., p. 424.  
1905. *P.*, Stebbing, S.A. Crustacea, pt. 3, p. 89.  
1910. *P.*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910], pp. 36, 123.

## GEN. PROCESSA, Leach.

1815. *Processa*, Leach, Malac. Podophth. Brit., text to pl. 41.  
1905. *P.*, Stebbing, S.A. Crustacea, pt. 3, p. 89.  
1910. *P.*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910], p. 123.

## \* PROCESSA CANALICULATA, Leach.

1815. *Processa canaliculata*, Leach, Malac. Podophth. Brit., pl. 41 (with text).  
1905. *P. c.*, Stebbing, S.A. Crustacea, pt. 3, p. 91.  
Specimens sent by Dr. Gilchrist, No. 217, taken off Cape St. Blaize, from a depth of 73 m.; No. 134, from Knysna Heads distant NE. by N.  $\frac{1}{2}$  N. 2 miles, depth 55–59 m.; and a small specimen taken between Bird Island and mainland between 18 and 29 m. depth.  
1910. *P. c.*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910], p. 123.

## FAMILY GLYPHOCRANGONIDÆ.

1884. *Glyphocrangonidæ*, S. I. Smith, Rep. U.S. Fish. Comm. for 1882, p. 364.  
1908. *G.*, Stebbing, S.A. Crustacea, pt. 4, p. 36.

## GEN. GLYPHOCRANGON, A. Milne-Edwards.

1881. *Glyphocrangon*, A. M.-Edw., Ann. Sci. Nat., Ser. 6, vol. xi., p. 3.  
1901. *G.*, Alcock, Catal. Indian Deep-Sea Macrura, p. 125.  
1908. *G.*, Stebbing, S.A. Crustacea, pt. 4, p. 36.

## \* GLYPHOCRANGON SCULPTUS (S. I. Smith).

1882. *Rhachocaris sculpta*, Smith, Bull. Mus. Comp. Zool. Harvard, vol. x., p. 49, pl. 5, fig. 3, pl. 6, figs. 3, 3a-d.  
1886. *Glyphocrangon sculptus*, Smith, Rep. U.S. Fish. Comm. for 1885, p. 655 (51), pl. 8, fig. 3, pl. 9, figs. 1, 2.

1908. *G. s.*, Stebbing, S.A. Crustacea, pt. 4, p. 37.

Specimens sent by Dr. Gilchrist, Nos. 172, 191, 192, from Cape Point NE. by E.  $\frac{1}{4}$  E. 40 miles, depth between 1,463 and 1,645 m.; another specimen, No. 188, from Cape Point N. 70° E. 40 miles, came, or was reputed to come, from a depth of about 1,463 m.

\* GLYPHOCRANGON LONGIROSTRIS (S. I. Smith).

1882. *Rhachocaris longirostris*, Smith, Bull. Mus. Comp. Zoöl.

Harvard, vol. x., p. 51, pl. 5, fig. 1, pl. 6, fig. 1.

1886. *Glyphocrangon l.*, Smith, Rep. U.S. Fish. Comm. for 1885, p. 655 (51), pl. 8, figs. 1, 2, pl. 9, figs. 3, 4, 5.

1908. *G. l.*, Stebbing, S.A. Crustacea, pt. 4, p. 38.

Specimens sent by Dr. Gilchrist, Nos. 185, 186, from Cape Point NE. by E. 38 $\frac{1}{2}$  miles, depth between 1,372 and 1,463 m.; No. 187, from Cape Point N. 77° E., depth between 1,207 and 1,280 m.; No. 189, from Cape Point NE.  $\frac{3}{4}$  E. 40 miles, depth between 1,317 and 1,463 m.; and No. 190, Cape Point N. 58° E. 49 miles, depth 1,646 m. I have already noticed that the occurrence of this and the preceding species in the same neighbourhood, on ground of the same character, and all at considerable depths, may excite a suspicion that their separation rests on a rather insecure foundation.

## FAMILY ALPHEIDÆ.

1899. *Alpheidæ*, Coutière, Thèse présentée à la Faculté des Sciences de Paris.

In this volume M. Coutière gives a bibliographical list of authors concerned with this family or members of it, the catalogue occupying between eight and nine octavo pages. He himself and other writers have added considerably to the list in the intervening years. As we have here only to deal with a single specimen, this reference must suffice.

## GEN. ALPHEUS, J. C. Fabricius.

1798. *Alpheus*, Fabricius, Suppl. Ent. Syst., pp. 380, 404.

1910. *A.*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910], pp. 119, 120.

In the interval between these two references this genus has had an extensive progeny of other genera.

## ALPHEUS EDWARDSII (Audouin).

1826. *Athanasus edwardsii*, Audouin, Explic. Planches Crust. Égypte, p. 274, Savigny's pl. 10, fig. 1.  
 1843. *Alpheus e.*, Krauss, Südafrik. Crust., p. 55.

Krauss says: "I found this widely-distributed species in great numbers in the mud of Natal Bay, where it digs itself deep perpendicular holes. At the ebb of the tide it sits at the openings of the holes, but at any one's approach it at once rapidly withdraws, at the same time producing a snapping sound. The colour is dusky green. The length from the frontal margin to apex of telson is 18 lines." Krauss gives a reference to Audouin, but calls the species *Alpheus edwardsii*, Milne-Edwards, which, according to Coutière (*loc. cit.*, p. 11) is properly *A. megacheles*, Hailstone, and distinct from Audouin's species. Referring to Bianconi's description and figures of *A. edwardsii* (Audouin-Savigny), Coutière says (*loc. cit.*, p. 23): "The figure 1<sub>1</sub>, pl. x., of Savigny, corresponds well to the form named *A. Edwardsi* by the majority of authors; the figure 1<sub>2</sub>, pl. x. (1a (?) Bianconi), comes nearer to the very polymorphic species *A. crassimanus*, Heller, to which Bianconi's description and figure must surely relate. Lastly, the little chela represented pl. x. (1 f.) (Savigny) appears to me to be that of the two sexes of *A. strenuus*, Dana. The three forms just noticed live side by side, are very much alike, very common and perhaps simple varieties of a single species. It appears to me quite plausible that Savigny may have collected them all."

## \* ALPHEUS CRASSIMANUS, Heller.

1866. *Alpheus crassimanus*, Heller, Novara Crustacea, p. 107, pl. 10, figs. 2, 2a.  
 1884. *A. edwardsii*, Miers, Alert Crustacea, p. 284.  
 1888. *A. e.*, de Man, J. Linn. Soc., vol. xxii., No. 140, p. 266.  
 1888. *A. crassimanus*, Bate, Challenger Macrura, Reports, vol. xxiv., p. 554, pl. 99, figs. 2, 2k.  
 1899. *A. c.*, Coutière, Thèse, pp. 239, &c., fig. 293.  
 1910. *A. c.*, Stebbing, S.A. Crustacea, pt. 5.

No. 12, sent by Dr. Gilchrist, was dug out of mud, Zwartskop River, Algoa Bay. As above explained, this specimen may possibly be referable to *A. strenuus*, Dana, or *A. edwardsii* (Audouin), or to both. It seems to me to

agree closely with Heller's account of his species, and with Bate's and Coutière's figures of the smaller cheliped, which in this example is on the right of the animal. In the second peræopods the first two carpal jointlets are respectively 4 mm. and 2.5 mm., as compared with the relation 5:3 given by Heller, but very different from those assigned by Dr. de Man to two female specimens from the Mergui Archipelago. These are given as  $4\frac{1}{2}$  for the first, and  $4\frac{1}{3}$  for the second joint in one example, and in the other  $2\frac{2}{5}$  for the first, and  $2\frac{1}{5}$  for the second, with the remark that—"It was a specimen belonging to this variety which was figured in the 'Novara Reise.'"  
The Algoa Bay specimen measures about 46 mm. from rostrum to end of telson.

### FAMILY HIPPOLYTIDÆ.

1888. *Hippolytida*, Bate, Challenger Macrura, Reports, vol. xxiv., p. 576.  
 1905. H., Stebbing, S.A. Crustacea, pt. 3, p. 97.  
 1906. H., Calman, Ann. Nat. Hist., Ser. 7, vol. xvii., p. 29.  
 1910. H., Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910], pp. 36, 99.

### GEN. HIPPOLYTE, Leach.

1814. *Hippolyte*, Leach, Edinb. Encycl., vol. vii., p. 431.  
 1860. *Virbius*, Stimpson, Pr. Ac. Sci. Philad., p. 104 (35).  
 1910. H., Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910], p. 100.

### HIPPOLYTE ENSIFERA, Milne-Edwards.

1837. *Hippolyte ensiferus*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 374.

Milne-Edwards states that the rostrum is very large, lamellar, and that the carpus is biarticulate in the second peræopods, so that the generic position of this species is doubtful.

1843. H. e., Krauss, Südafrik. Crust., p. 56.

Specimens in the Stuttgart Museum, brought by von Ludwig from the Cape in 1828. The length is given as 7 lines, equal to about 15 mm.



HIPPOLYTE KRAUSSIANA (Stimpson).

1860. *Virbius kraussianus*, Stimpson, Pr. Ac. Sci. Philad., p. 105 (36).  
Taken in Simon's Bay, near the Cape of Good Hope. The length is given as 17·5 mm. Stimpson states that the rostrum is slender.

GEN. MERHIPPOLYTE, Bate.

1888. *Merhippolyte*, Bate, Challenger Macrura, Reports, vol. xxiv., p. 618.  
1905. *M.*, Stebbing, S.A. Crustacea, pt. 3, p. 103.  
1906. *M.*, Calman, Ann. Nat. Hist., Ser. 7, vol. xvii., p. 32.

\* MERHIPPOLYTE AGULHASENSIS, Bate.

1888. *Merhippolyte agulhasensis*, Bate, Challenger Macrura, Reports, vol. xxiv., p. 619, pl. 119, fig. 4.  
South of the Cape, lat. 35° 4' S., long. 18° 37' E., from a depth of 274 m.  
1905. *M. a.*, Stebbing, S.A. Crustacea, pt. 3, p. 103.  
No. 59A, sent by Dr. Gilchrist, from 25 miles off Lion's Head, depth between 240 and 249 m., and from Gericke Point N.  $\frac{3}{4}$  E., Knysna Heads E.  $\frac{3}{4}$  N., depth 212 m.  
1906. *M. a.*, Calman, Ann. Nat. Hist., Ser. 7, vol. xvii., p. 32.

GEN. LEONTOCARIS, Stebbing.

1905. *Leontocaris*, Stebbing, S.A. Crustacea, pt. 3, pp. 21, 98.  
1906. *L.*, Calman, Ann. Nat. Hist., Ser. 7, vol. xvii., p. 31.  
1906. *L.*, Kemp, Ann. Nat. Hist., Ser. 7, vol. xvii., p. 297.  
1910. *L.*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910], pp. 99, 113.

\* LEONTOCARIS PAULSONI, Stebbing.

1905. *Leontocaris paulsoni*, Stebbing, S.A. Crustacea, pt. 3, p. 99, pl. 26.  
No. 63, sent by Dr. Gilchrist, from Lion's Head N. 67° E. 25 miles; depth between 240 and 249 m.

FAMILY PANDALIDÆ.

1888. *Pandalidæ*, Bate, Challenger Macrura, Reports, vol. xxiv., p. 625.

1899. *P.*, Calman, Ann. Nat. Hist., Ser. 7, vol. iii., p. 28.

1910. *P.*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910], pp. 36, 84.

#### GEN. PANDALUS, Leach.

1814. *Pandalus*, Leach, Edinb. Encycl., vol. 7, p. 432.

1888. *P.*, Bate, Challenger Macrura, Reports, vol. xxiv., pp. 626, 665.

1910. *P.*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910], p. 85.

#### PANDALUS MODESTUS, Bate.

1888. *Pandalus modestus*, Bate, Challenger Macrura, Reports, vol. 24, p. 670, pl. 114, figs. 4, *b*, *k*, *l*, *l'*, *m*.

Specimens taken in lat. 35° 4' S., long. 18° 37' E., at the Agulhas Bank, off the Cape of Good Hope, from a depth of 273 m. The entire length of the animal 17 mm.

#### GEN. PLESIONIKA, Bate.

1888. *Plesionika*, Bate, Challenger Macrura, Reports, vol. xxiv., pp. 626, 640.

1910. *P.*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910], pp. 85, 93.

#### \* PLESIONIKA MARTIA (A. Milne-Edwards).

1883. *Pandalus martius*, A. M.-Edw., pl. 18 (acc. to Kemp), pl. 21 (acc. to Rathbun), Recueil, &c.

Mr. Kemp gives the title as "Recueil de figures de Crustacés nouveaux ou peu connus." Miss Rathbun gives it as "Recueil Planches Expéd. 'Travailleur.'"

1888. *Plesionika semilævis*, Bate, Challenger Macrura, Reports, vol. xxiv., p. 644, pl. 113, figs. 3, 3*b*.

1896. *Plesionika martia*, Caullery, Ann. Univ. Lyon, vol. xxvi., p. 378, pl. 15, figs. 1-6.

1908. *Pandalus martius*, M. J. Rathbun, Bull. U.S. Fish. Comm. for 1903, pt. 3, p. 914.

1910. *Plesionika martia*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910], p. 93, pl. 12, figs. 1-4.

Other references for the genus and species may be gathered from Mr. Kemp's treatise.

1910. *P. m.*, Stebbing, S.A. Crustacea, pt. 5.

Nos. 59, 60, 61, sent by Dr. Gilchrist, were taken from

depths between 240 and 249 m., Lion's Head, N. 67° E. distant 25 miles. In the specimen measured the rostrum from apex to the cornea of the eye was 33 mm. long, the space thence to middle of hind margin of carapace 23 mm., the pleon 60 mm., of which the telson was 12 mm., the total length being thus 116 mm. There are eight spines on the upper side of the rostrum, two of which, following a very long bare space, are situated near the eyes, and are followed by a much more closely placed set successively smaller backwards, the dorsal carina being continued beyond them but not reaching the hind margin of the carapace. The underside of the rostrum is serrately denticulate. A full account and good figure of this striking species are given by Mr. Kemp.

GEN. CHLOROTOCUS, A. Milne-Edwards.

1882. *Chlorotocus*, A. M.-Edwards, Rapport Comm. pour la faune sous-marine, p. 18.  
 1888. *C.*, Bate, Challenger Macrura, Reports, vol. xxiv., p. 627, 673.

CHLOROTOCUS INCERTUS, Bate.

1888. *Chlorotocus incertus*, Bate, Challenger Macrura, Reports, vol. xxiv., p. 674, pl. 116, figs. 1, 1*a-i*, 1*k*, 2.  
 From Agulhas Bank, off the Cape of Good Hope, lat. 35° 4' S., long. 18° 37' E.; depth 273 m.

FAMILY ATYIDÆ.

1879. *Atyidæ*, Kingsley, Pr. Ac. Sci. Philad., p. 414.  
 1888. *A.*, Bate, Challenger Macrura, Reports, vol. xxiv., pp. 481, 691.  
 1895. *A.*, Ortmann, Pr. Ac. Sci. Philad., for 1894, p. 397.  
 1909. *A.*, Calman, in Lankester's Treatise on Zoology, pt. 7, fasc. 3, p. 311.

GEN. CARIDINA, Milne-Edwards.

1837. *Caridina*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 362.  
 1888. *C.*, Bate, Challenger Macrura, Reports, vol. xxiv., p. 702.  
 1892. *C.*, de Man, in Weber's Zool. Niederl. Ost-Indien, vol. ii., p. 363.  
 1908. *C.*, de Man, Rec. Indian Museum, vol. ii., pt. 3, p. 256.  
 1910. *C.*, Lenz, Deutsch. Zentral-Afr. Exp., vol. iii., pt. 3, p. 10.  
 The name *Pelias*, Roux, 1833, was preoccupied.

## CARIDINA NILOTICA (Roux).

1833. *Pelias niloticus*, Roux, Ann. Sci. Nat., vol. xxviii., p. 73, pl. 7.  
 1908. *Caridina nilotica*, de Man, Records of the Indian Museum,  
 vol. ii., pp. 255, 262, 263, pl. 20.

According to Dr. de Man, "all the varieties living on the islands of the Indian Archipelago and in Bengal are certainly distinct from those occurring in Africa." He names as a new variety, *natalensis*, specimens collected in the river Umgeni, Natal, wrongly referred by Professor Weber (Zool. Jahrb., vol. x., p. 168, 1897) to *Caridina wyckii* (Hickson), and accepts as an independent variety of *C. nilotica*, the var. *paucipara* from Natal, which Professor Weber (*loc. cit.*, p. 168) named as a variety of Hickson's *C. wyckii*. The species designated by Weber as *C. typus*, Milne-Edwards, from Natal, is not mentioned by de Man in his latest paper, so that its name, either as species or variety under the new scheme, remains vague. *Caridina africana*, Kingsley (Bull. Essex Inst., vol. xiv., p. 127 (23), pl. 1, fig. 3, 1882), from Zululand, similarly remains indefinite.

## FAMILY OPLOPHORIDÆ.

1878. *Oplophorinæ*, Kingsley, Bull. Essex Inst., vol. x., p. 68.  
 1905. *Miersiidae*, Stebbing, S.A. Crustacea, pt. 3, p. 104.  
 1906. *Hoplophoridae*, Kemp, Fisheries, Ireland, Sci. Invest., 1905, I. [1906], p. 3.  
 1906. *Oplophoridae*, M. J. Rathbun, Bull. U.S. Fish. Comm. for 1903, pt. 3, p. 921.  
 1910. *Hoplophoridae*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910], pp. 35, 56.

## GEN. ACANTHEPHYRA, A. Milne-Edwards.

1881. *Acanthephyra*, A. Milne-Edwards, Ann. Sci. Nat., Ser. 6, vol. xi., Art. 4, p. 12.  
 1905. *A.*, Stebbing, S.A. Crustacea, pt. 3, p. 106.  
 1906. *A.*, Kemp, Fisheries, Ireland, Sci. Invest., 1905, I. [1906], p. 3.  
 1910. *A.*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910], pp. 55, 56.



## \* ACANTHEPHYRA PURPUREA, A. Milne-Edwards.

1881. *Acanthephyra purpurea*, A. Milne-Edwards, Comptes Rendus, vol. 93, p. 933.
1905. *A. batei*, Stebbing, S.A. Crustacea, pt. 3, p. 107, pl. 24B.  
No. 66, sent by Dr. Gilchrist, from a depth of 658 m., Cape Point Lighthouse, S. 83° E., distant 35½ miles.
1906. *A. purpurea*, Kemp, Fisheries, Ireland, Sci. Invest., 1905, I. [1906], p. 4, pl. 1, pl. 2, figs. 1-3.
1910. *A. p.*, Kemp, Fisheries, Ireland, Sci. Invest., 1908, I. [1910], p. 56.

## GEN. NOTOSTOMUS, A. Milne-Edwards.

1881. *Notostomus*, A. Milne-Edwards, Ann. Sci. Nat., Ser. 6, vol. xi., p. 7.
1893. *N.*, Stebbing, History of Crustacea, p. 245.
1905. *N.*, Stebbing, S.A. Crustacea, pt. 3, p. 109.

## \* NOTOSTOMUS WESTERGRENI, Faxon.

1893. *Notostomus westergreni*, Faxon, Bull. Mus. Comp. Zool. Harvard, vol. xxiv., p. 208.
1905. *N. w.*, Stebbing, S.A. Crustacea, pt. 3, p. 110.  
The specimen, sent by Dr. Gilchrist, was taken from a depth of about 1,463 m., Cape Point, N. 70° E., distant 40 miles.

## SCHIZOPODA.

1885. *Schizopoda*, Sars, Challenger Schizopoda, Reports, vol. xiii., pt. 37.
1910. *S.*, Hansen, Schizopoda, Siboga Exp., pt. 37.

## TRIBE THYSANOPODACEA.

1863. *Thysanopodea*, Claus, Zeitschr. wiss. Zool., vol. xiii., pt. 3, p. 442.
1883. *Euphausiacea*, Boas, Morphologisches Jahrbuch, vol. viii., pt. 4, p. 487.
1908. *E.*, Hansen, Belgica Schizopoda, p. 3, and Ingolf Malacostraca, p. 84.
1910. *E.*, Hansen, Schizopoda, Siboga Exp., pt. 37, p. 78.

## FAMILY THYSANOPODIDÆ.

1852. *Euphausiæ*, Dana, U.S. Espl. Exp., vol. xiii., p. 636.

1905. *Thysanopodidæ*, Stebbing, S.A. Crustacea, pt. 3, p. 111.

## GEN. THYSANOPODA, Milne-Edwards.

1830. *Thysanopoda*, Milne-Edwards, Ann. Sci. Nat., Ser. 1, vol. xix.

1837. *T.*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 463.

Dana (*loc. cit.*, pp. 637, 1610) adopts *Nocticula*, Thompson, Zoological Researches, p. 52, pl. 5, fig. 1, as taking precedence of *Thysanopoda*, but Thompson's genus, while possibly an error for *Noctiluca*, is too vague for adoption, since Sars (*loc. cit.*, p. 71) identifies it with *Euphausia* instead of *Thysanopoda*. Milne-Edwards, among various references to Thompson's Researches, leaves his *Nocticula* unnoticed.

## \* THYSANOPODA AGASSIZI, Ortmann.

1894. *Thysanopoda agassizi*, Ortmann, Bull. Mus. Comp. Zoöl. Harvard, vol. xxv., p. 99.

1905. *T. a.*, Ortmann, Bull. U.S. Fish. Comm. for 1903, pt. 3, p. 964.

1910. *T. agassizii*, Hansen, Schizopoda, Siboga Exp., pt. 37, p. 87, pl. 13, figs. 3 *a-g*.

1910. *T. agassizi*, Stebbing, S.A. Crustacea, pt. 5.

No. 145, sent by Dr. Gilchrist, procured by shrimp trawl, Sandy Point (approx.) N.W. by W. 17 miles, from 914 m. depth. The specimen fully agrees with Hansen's account of the frontal plate and the other characters of the carapace, including the minute denticle a little before the hinder end of the lower margin. Its length is not less than the 32 mm. assigned to the specimen noticed by Ortmann in 1905, and, as in that, the preanal spine has two points, one shorter than the other.

## GEN. EUPHAUSIA, Dana.

1852. *Euphausia*, Dana, U.S. Expl. Exp., vol. xiii., p. 637.

1905. *E.*, Stebbing, S.A. Crustacea, pt. 3, p. 111.

1905. *E.*, Hansen, Bull. Mus. Océanogr. Monaco, No. 30, p. 11.

1905. *E.*, Hansen, Bull. Mus. Océanogr. Monaco, No. 42, p. 7.

1910. *E.*, Hansen, Schizopoda, Siboga Exp., p. 89.

## EUPHAUSIA KROHNII (Brandt).

1851. *Thysanopoda krohnii*, Brandt, Middendorff's Sibirische Reise, vol. ii., pt. 1, p. 127.  
1863. *Euphausia mülleri*, Claus, Zeitschr. wiss. Zool., vol. xiii., p. 444, pl. 28, figs. 29-31, pl. 29.  
1885. *E. pellucida* (part), Sars (not Dana), Challenger Schizopoda, Reports, vol. xiii., p. 75, pls. 11, 12.

Among various localities for this species Sars gives "South of Cape of Good Hope." But for his identification of the species with Dana's *E. pellucida* I may refer to my remarks in Proc. Zool. Soc. London, for 1900, p. 538, and to those of H. J. Hansen under the next reference, which leave it doubtful what was the species actually taken south of the Cape.

1905. *E. mülleri*, Hansen, Bull. Mus. Océanogr. Monaco, No. 42, p. 11.

In a preliminary discussion Hansen discards Dana's *E. pellucida* as unrecognisable, and further says: "According to the description and the figures of Sars, *E. pellucida*, G. O. S., is distinguished by possessing two pairs of lateral denticles on the carapace, while only one pair or no denticle at all is found in the other forms of the genus. But I have four excellent species with two pairs of lateral denticles, each of these species from a large number (more than twenty) stations, and judging from the list of stations given by Sars and from his enumerations of synonyms I am sure that he has mixed together at least three of these species. Dana figures *E. pellucida* as a very slender species with small eyes; if his figures be tolerably correct, none of my four species can be referred to that form."

1906. *E. mülleri*, Holt and Tattersall, Fisheries, Ireland, Sci. Invest., 1904, V. [1906], p. 6.  
1910. *E. krohnii*, Hansen, Schizopoda, Siboga Exp., pt. 37, p. 90.

## EUPHAUSIA LUCENS, Hansen.

1885. *Euphausia splendens*, Sars, Challenger Schizopoda, Reports, vol. xiii., p. 80, pl. 13, figs. 7-17.

"Off Cape of Good Hope." Sars himself doubtfully refers this species to the form so named by Dana, and in Proc. Zool. Soc., 1900, p. 539, I have dwelt on the difficulties of identification.

1905. *E. lucens*, Hansen, Bull. Mus. Océanogr. Monaco, No. 42, p. 9.

Hansen observes that "the Copenhagen Museum possesses numerous specimens from three places south of or far south-west of the Cape of Good Hope and from various localities in the Pacific." He thinks that *E. splendens*, Dana, may be identical with *E. mülleri*, Claus, but wishing to avoid further confusion, he concludes: "I will cancel Dana's species as unrecognisable; for the species described by Sars as *E. splendens* I propose the name *E. lucens*."

#### EUPHAUSIA SIMILIS, Sars.

1885. *Euphausia similis*, Sars, Challenger Schizopoda, Reports, vol. xiii., p. 79, pl. 13, figs. 1-6.  
1900. *E. similis*, Stebbing, Pr. Zool. Soc. London, p. 544.

In 1905 Holt and Tattersall (Fisheries, Ireland, p. 134) say that "The International lists contain a record of the occurrence of *E. similis*" off the Cape of Good Hope, Schott being the authority. The name *similis* apparently refers to the similarity between this species and that which Sars described as *E. pellucida*, including his *E. bidentata*, now identified with *E. krohnii*.

1906. *E. s.*, Coutière, Exp. Antarctique française, Schizopodes, p. 7.  
1910. *E. s.*, Hansen, Schizopoda, Siboga Exp., pt. 37, p. 94.

#### EUPHAUSIA RECURVA, Hansen.

1905. *Euphausia recurva*, Hansen, Bull. Mus. Océanogr. Monaco, No. 42, pp. 11, 13.  
"It is common in the area between lat. 30° S. and lat. 40° S. from the Cape of Good Hope to about long. 100° E."

#### GEN. PSEUDEUPHAUSIA, Hansen.

1910. *Pseudeuphausia*, Hansen, Schizopoda, Siboga Exp., pt. 37, p. 103.

The distinction from *Euphausia* is drawn from characters of the carapace, the fifth peræopods, the female ovisac, and the first pleopods of the male.

#### \* PSEUDEUPHAUSIA LATIFRONS (Sars).

1883. *Euphausia latifrons*, Sars, Vid. Selsk. Forhandl. Christian., No. 7, p. 19.



1885. *E. l.*, Sars, Challenger Schizopoda, Reports, vol. xiii., p. 95, pl. 16, figs. 17-23.
1905. *E. l.*, Stebbing, S.A. Crustacea, pt. 3, p. 112.  
No. 33, sent by Dr. Gilchrist, and reported as occurring in great numbers N. 10° W. of Cape St. Blaize, distant 33 miles.
1906. *E. l.*, Tattersall, Herdman's Pearl Fisheries, Suppl. Rep. 33, p. 161, pl. 1, figs. 1, 2.
1908. *E. l.*, Hansen, Revue Suisse de Zoologie, vol. xvi., fasc. 2, p. 158.
1910. *Pseudeuphausia l.*, Hansen, Schizopoda, Siboga Exp., pt. 37, p. 103, pl. 15, figs. 1 *a-d*.

## GEN. NYCTIPHANES, Sars.

1883. *Nyctiphanes*, Sars, Vid. Selsk. Forhandl. Christian., No. 7, p. 23.
1905. *N.*, Stebbing, S.A. Crustacea, pt. 3, p. 113.
1905. *N.*, Holt and Tattersall, Fisheries, Ireland, No. 4, app. to pt. 2, p. 103.

## \* NYCTIPHANES AUSTRALIS, Sars.

1883. *Nyctiphanes australis*, Sars, Vid. Selsk. Forhandl. Christian., No. 7, p. 24.
1905. *N. a.*, Stebbing, S.A. Crustacea, pt. 3, p. 113.  
No. 22, sent by Dr. Gilchrist, from a depth of 73 m., off Cape St. Blaize, distant 10 miles.
1906. *N. a.*, Holt and Tattersall, Fisheries, Ireland, Sci. Invest., 1904, V. [1906], p. 49.

## GEN. THYSANOESSA, Brandt.

1851. *Thysanoessa* (sub-gen.), Brandt, in von Middendorff's sibirische Reise, Krebse, p. 52.
1885. *T.*, Sars, Challenger Schizopoda, Reports, vol. xiii., pp. 63, 119.

## THYSANOESSA GREGARIA, Sars.

1883. *Thysanoessa gregaria*, Sars, Vid. Selsk. Forhandl. Christian., No. 7, p. 26.
1885. *T. g.*, Sars, Challenger Schizopoda, Reports, vol. xiii., p. 120, pl. 21, figs. 8-17, pl. 22.  
South of Cape of Good Hope.
1905. *T. g.*, Hansen, Bull. Mus. Océanogr. Monaco, No. 42, pp. 27, 28.

## GEN. NEMATOSCELIS, Sars.

1883. *Nematoscelis*, Sars, Vid. Selsk. Forhandl. Christian., No. 7, p. 27.  
 1885. *N.*, Sars, Challenger Schizopoda, Reports, vol. xiii., pp. 63, 126.  
 1905. *N.*, Hansen, Bull. Mus. Océanogr. Monaco, No. 42, p. 28.

## NEMATOSCELIS TENELLA, Sars.

1883. *Nematoscelis tenella*, Sars, Vid. Selsk. Forhandl. Christian., No. 7, p. 28.  
 1885. *N. t.*, Sars, Challenger Schizopoda, Reports, vol. xiii., p. 133, pl. 25, figs. 5-7.  
 "South of the Cape of Good Hope."  
 1905. *N. t.*, Hansen, Bull. Mus. Océanogr. Monaco, No. 42, p. 30.

## GEN. STYLOCHEIRON, Sars.

1883. *Stylocheiron*, Sars, Vid. Selsk. Forhandl. Christian., No. 7, p. 29.  
 1885. *S.*, Sars, Challenger Schizopoda, Reports, vol. xiii., pp. 63, 126.

## STYLOCHEIRON LONGICORNE, Sars.

1883. *Stylocheiron longicorne*, Sars, Vid. Selsk. Forhandl. Christian., No. 7, p. 32.  
 "Hab. Off the Cape of Good Hope (19de December 1873). 1 specimen (mounted)." Length 9 mm.  
 1885. *S. l.*, Sars, Challenger Schizopoda, Reports, vol. xiii., p. 144, pl. 27, fig. 5.  
 "One specimen only of this form, a female, is found in the collection, mounted in Canada balsam on a glass slide. The specimen measures in length 9 mm." Sars further states that it "was obtained at the surface of the sea, in the following locality:—Date. December 14, 1873. Locality. South of Cape of Good Hope." It is evident that the same specimen is intended under the two different dates. The Challenger was in Simon's Bay from the 12th to the 17th of December, and on the latter date left the Bay for the southern cruise at 6.30 a.m.  
 1893. *S. l.*, Ortmann, Schizop. Plankton Exp., vol. ii., p. 18.  
 1905. *S. sulmii*, Hansen, Bull. Mus. Océanogr. Monaco, No. 30, p. 30.  
 1905. *S. s.*, G. H. Fowler, Trans. Linn. Soc., Zool. Ser. 2, vol. x., pt. 4, pp. 112, 116, 129.

1908. *S. longicorne*, Hansen, Ingolf Malacostraca, p. 92.  
1910. *S. l.*, Hansen, Schizopoda, Siboga Exp., pt. 37, p. 120, pl. 16,  
figs. 5, *a-b*.

## TRIBE MYSIDACEA.

1863. *Mysidea*, Claus, Zeitsch. wiss. Zool., vol. xiii., pt. 3,  
p. 442.  
1883. *Mysidacea*, Boas, Morphologisches Jahrbuch, vol. viii., pt. 4,  
p. 487.  
1893. *M.*, Ortmann, Schizopoda Plankton Exp., vol. ii., pp. 6, 21.  
1908. *M.*, Hansen, Belgica Schizopoda, p. 12, and Ingolf Malacos-  
traca, p. 93.  
1909. *M.*, Calman, Crustacea, in Lankester's Treatise on Zoology,  
pt. 7, fasc. 3, p. 181.

## FAMILY LOPHOGASTRIDÆ.

1883. *Lophogastridæ*, Sars, Vid. Selsk. Forhandl. Christian., No. 7,  
p. 3.  
1885. *L.*, Sars, Challenger Schizopoda, Reports, vol. xiii., pp. 10, 13.  
1902. *L.*, Stebbing, S.A. Crustacea, pt. 2, p. 43.  
1908. *L.*, Stebbing, S.A. Crustacea, pt. 4, p. 42.  
1909. *L.*, Calman, Crustacea, in Lankester's Treatise on Zoology,  
pt. 7, fasc. 3, p. 181.

## GEN. LOPHOGASTER, Michael Sars.

1857. *Lophogaster*, M. Sars, Forh. Skand. Naturf. Möde i Christiania,  
1856, p. 160.  
1902. *L.*, Stebbing, S.A. Crustacea, pt. 2, p. 43.

## \* LOPHOGASTER TYPICUS, Michael Sars.

1857. *Lophogaster typicus*, M. Sars, Forh. Skand. Naturf. Möde i,  
Christiania, 1856, p. 160.  
1885. *L. t.*, G. O. Sars, Challenger Schizopoda, Reports, vol. xiii.,  
p. 14, pl. 1, figs. 1-7.

Taken by the Challenger Expedition, south of the Cape of  
Good Hope, lat. 34° 41' S., long. 18° 36' E., from a depth  
of 179 m., and lat. 35° 4' S., long. 18° 37' E., from a depth of  
274 m.

1902. *L. t.*, Stebbing, S.A. Crustacea, pt. 2, p. 43.

No. 138, sent by Dr. Gilchrist, was obtained from a depth of 73 m., Cape St. Blaize, NE. by N.  $\frac{1}{4}$  N., distant  $11\frac{1}{2}$  miles.

1906. *L. t.*, Ortmann, Pr. U.S. Mus., vol. xxxi., p. 23.

GEN. GNATHOPHAUSIA, von Willemoes Suhm.

1875. *Gnathophausia*, von Willemoes Suhm, Trans. Linn. Soc., Ser. 2, vol. i., p. 28.

1906. *G.*, Illig, Zool. Anzeiger, vol. xxx., pp. 227, 319.

1908. *G.*, Stebbing, S.A. Crustacea, pt. 4, p. 42.

1908. *G.*, Hansen, Ingolf Malacostraca, p. 93.

1910. *G.*, Hansen, Schizopoda, Siboga Exp., pt. 37, p. 17.

\* GNATHOPHAUSIA CALCARATA, Sars.

1883. *Gnathophausia calcarata*, Sars, Vid. Selsk. Forhandl. Christian., No. 7, p. 5.

1908. *G. c.*, Stebbing, S.A. Crustacea, pt. 4, p. 43.

No. 229, sent by Dr. Gilchrist, was obtained between 1,327 and 1,463 m. depth, Cape Point NE.  $\frac{3}{4}$  E., 40 miles distant.

FAMILY ANCHIALINIDÆ.

1906. *Gastrosaccidæ*, Norman and Scott, Crustacea of Devon and Cornwall, p. 24.

1909. *Gastrosaccinæ*, Calman, Crustacea, in Lankester's Treatise on Zoology, pt. 7, fasc. 3, p. 182.

1910. *G.*, Hansen, Schizopoda, Siboga Exp., pt. 37, pp. 12, 50.

As *Anchialus*, Kröyer, 1861, is the earliest of the five or six genera assigned to this subdivision of the family Mysidæ, it should be the foundation of the family name. *Anchialus* being preoccupied gives place to *Anchialina*, Norman and Scott, 1906.

GEN. ANCHIALINA, Norman and Scott.

1861. *Anchialus* (preocc.), Kröyer, Naturhistorisk Tidsskrift, Ser. 3, vol. i., p. 53.

1885. *A.*, Sars, Challenger Schizopoda, Reports, vol. xiii., pp. 173, 192.

Sars here refers Kröyer's genus to the second series of the Nat. Tidsskrift, instead of the third as correctly given in his Mediterranean Mysidæ, 1877.



1893. *A.*, Ortmann, Schizopoda Plankton Exp., vol. ii., p. 22.  
 1906. *Anchialina*, Norman and Scott, Crustacea of Devon and Cornwall, p. 24.  
 1910. *A.*, Hansen, Schizopoda, Siboga Exp., pt. 37, p. 50.

ANCHIALINA TRUNCATA (Sars).

1883. *Anchialus truncatus*, Sars, Vid. Selsk. Forhandl. Christian., No. 7, p. 38.  
 1885. *A. typicus*, Sars, Challenger Schizopoda, Reports, vol. xiii., p. 193, pl. 34, figs. 4-24.  
 "Taken at the surface of the sea off Cape of Good Hope," lat. 34° 41' S., long. 18° 36' E.  
 1910. *Anchialina truncata*, Hansen, Schizopoda, Siboga Exp., pt. 37, pp. 51, 53.

Hansen remarks: "*A. truncata* G. O. Sars = *A. typica* G. O. Sars (not Kröyer) differs from the real *A. typica* Kr. in a number of features. The frontal plate is a little longer with the transverse, straight terminal margin; the eye-stalks seem to be shorter; the protruding part of the fifth joint of the male gnathopods is more removed from the distal end of the joint; the sixth joint of the first pair of the thoracic legs in the male is quite different, being divided into 3 sub-joints with about 11 long, cylindrical setæ distributed along the distal two-fifths of the interior margin of the joint and on its end; the pseudobranchial plate of the male pleopods has the outer angle sharp and setose; finally the exopod of third pleopods (not fourth pair, as stated by Sars) is extremely different, resembling much more a normal ramus."

FAMILY MYSIDÆ.

1910. *Mysina*, Hansen, Schizopoda, Siboga Exp., pt. 37, pp. 12, 62.  
 Hansen subdivides this family or sub-family into four tribes, which he calls *Erythropini*, *Leptomysini*, *Mysini*, and *Heteromysini*. *Cæsaromysis* and *Katerythrops* are placed in the first of these groups, *Leptomysis* is in the second.

GEN. CÆSAROMYSIS, Ortmann.

1893. *Cæsaromysis*, Ortmann, Schizopoda Plankton Exp., vol. ii., pp. 22, 24.  
 1905. *C.*, Stebbing, S.A. Crustacea, pt. 3, p. 114.

## \* CÆSAROMYSIS HISPIDA, Ortmann.

1893. *Cæsaromysis hispida*, Ortmann, Schizopoda Plankton Exp., vol. ii., p. 24, pl. 1, figs. 8, *a-g*, *l*, *z*.  
 1905. *C. h.*, Stebbing, S.A. Crustacea, pt. 3, p. 115.  
 No. 102, sent by Dr. Gilchrist, was obtained from a depth of 347 m., Lion's Head S. 72° E., distant 47 miles.

## GEN. KATERYTHROPS, Holt and Tattersall.

1905. *Katerythrops*, Holt and Tattersall, Rep. Fish. Ireland, 1902-3, pt. 2, app. 4, p. 117.

## KATERYTHROPS DACTYLOPS, Illig.

1906. *Katerythrops dactylops*, Illig, Zool. Anzeiger, vol. xxx., p. 198, figs. A, B, in text.  
 Taken NW. from Cape Town, in 1,800 m. depth, Valdivia Expedition.

## GEN. LEPTOMYSIS, Sars.

1869. *Leptomysis*, Sars, Undersøgelser Christianiafjordens Dybvandsfauna, p. 29.  
 1876. *L.*, Sars, Arch. Naturv. Kristian., vol. ii., p. 36.

## LEPTOMYSIS CAPENSIS, Illig.

1906. *Leptomysis capensis*, Illig, Zool. Anzeiger, vol. xxx., p. 206, figs. A-D, in text.  
 From comparatively small depths (80-100 m.) on the Agulhas Bank; Valdivia Expedition.

## STOMATOPODA.

1817. *Stomapoda*, Latreille, Le Règne Animal, vol. iii.  
 1825. *S.*, Latreille, Fam. Nat. du Règne Animal, p. 282.  
 1825. *S.*, Desmarest, Consid. gén. Crust., p. 246.  
 1829. *S.*, Latreille, Le Règne Animal, éd. 2, vol. iv., p. 101.  
 1843. *Stomatopoda*, Krauss, Südafrik. Crust., p. 60.  
 1886. *S.*, Brooks, Challenger Stomatopoda, Reports, vol. xvi., pt. 45.  
 1902. *S.*, Stebbing, S.A. Crustacea, pt. 2, p. 44, and 1908, pt. 4, p. 44.  
 1910. "*Stomatopoden*," Giesbrecht, F. und Fl. Golfes von Neapel, vol. xxxiii., Bibliography, pp. 232-237.

## FAMILY SQUILLIDÆ.

1803. *Squillares*, Latreille, Hist. Nat. Crust. et Ins., vol. vi., p. 270.  
 1825. *Unipeltata*, Latreille, Fam. Nat. du Règne Animal, p. 283.  
 1880. *Squillidæ*, Miers, Ann. Nat. Hist., Ser. 5, vol. v., pp. 1, 108.  
 1905. *Chloridellidæ*, M. J. Rathbun, Occasional Papers Boston Soc. Nat. Hist., No. 7, p. 29.  
 1908. *Squillidæ*, Stebbing, S.A. Crustacea, pt. 4, p. 44.  
 1909. S., Calman, Crustacea, in Lankester's Treatise on Zoology, pt. 7, fasc. 3, p. 331.

## GEN. SQUILLA, J. C. Fabricius.

1793. *Squilla*, Fabricius, Ent. Syst., vol. ii., p. 511.  
 1902. *Chloridella*, M. J. Rathbun, Pr. U.S. Nat. Mus., vol. xxvi., p. 54 footnote.

Miss Rathbun considers that *Squilla*, Fabricius, 1793, was preoccupied by O. F. Müller in 1776 for a genus of Amphipoda. But Müller's *Squilla ventricosa* is a synonym of Slabber's *Ptisica marina*, 1769, so that *Squilla*, Müller, cannot be upheld, and yet it does not seem reasonable that a name which had long been common property, as it were, should lapse through a casual misappropriation. Seba's *Squilla mantis*, vol. iii. of his Thesauri, 1760, sufficiently justified Fabricius in his own day, though now open to cavil, as coming from an authority not consistently binomial.

1902. *Squilla*, Stebbing, S.A. Crustacea, pt. 2, p. 45, and 1908, pt. 4, p. 44.  
 1910. S., Giesbrecht, F. und Fl. Golfes von Neapel, vol. xxxiii., pp. 2, 56.

## SQUILLA NEPA, Latreille.

1825. *Squilla nepa*, Latreille, Encycl. Méth. Hist. Nat., vol. x., p. 471.  
 1908. S. n., Stebbing, S.A. Crustacea, pt. 4, p. 44.  
 Specimens, sent by Mr. J. F. Quekett, from Durban waters.

## \* SQUILLA ARMATA, Milne-Edwards.

1837. *Squilla armata*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 521.  
 1894. S. a., Bigelow, Pr. U.S. Mus., vol. xvii., p. 515, figs 9, 10, in text.

1902. *S. a.*, Stebbing, S.A. Crustacea, pt. 2, p. 45.

No. 73, sent by Dr. Gilchrist, from 82 m. depth, Cape Point Lighthouse NW. by W.  $\frac{1}{2}$  W., distant  $7\frac{3}{4}$  miles.

GEN. *LYSIOSQUILLA*, Dana.

1852. *Lysiosquilla*, Dana, U.S. Expl. Exp., vol. xiii., p. 615.

1902. *L.*, Stebbing, S.A. Crustacea, pt. 2, p. 46.

1910. *L.*, Giesbrecht, F. und Fl. Golfes von Neapel, vol. xxxiii., pp. 2, 52.

*LYSIOSQUILLA MACULATA* (Fabricius).

1793. *Squilla maculata*, Fabricius, Ent. Syst., vol. ii., p. 511.

1852. *Lysiosquilla m.*, Dana, U.S. Expl. Exp., vol. xiii., p. 616.

1902. *L. m.*, Stebbing, S.A. Crustacea, pt. 2, p. 46.

Specimen, sent through Dr. Gilchrist, from Durban Museum, taken in Durban waters.

*LYSIOSQUILLA CAPENSIS*, Hansen.

1895. *Lysiosquilla capensis*, Hansen, Stomatopoden Plankton Exp., p. 74.

Hansen gives a brief provisional description of this species by saying that it "is easy to distinguish from all others by its possessing 14 teeth besides the terminal one on the finger [of the raptorial claw], 7 spines on the uropod and a telson shaped as in *Lysiosquilla maculata* (Fabricius)." One specimen from Port Elizabeth in the Museum at Strassburg.

GEN. *GONODACTYLUS*, Latreille.

1825. *Gonodactylus*, Latreille, Encycl. Méth. Hist. Nat., vol. x., p. 473.

1880. *G.*, Miers, Ann. Nat. Hist., Ser. 5, vol. v., p. 115.

1886. *G.*, Brooks, Challenger Stomatopoda, Reports, vol. xvi., p. 55.

1895. *G.*, Hansen, Stomatopoden Plankton Exp., p. 86.

*GONODACTYLUS CHIRAGRA* (Fabricius).

1793. *Squilla chiragra*, Fabricius, Ent. Syst., vol. ii., p. 513.

1825. *Gonodactylus chiragra*, Latreille, Encycl. Méth., vol. x., p. 473, pl. 325, fig. 2.

1843. *G. c.*, Krauss, Südafrik. Crust., p. 60.

Krauss says: "According to the description by Milne-Edwards in his Hist. nat. des Crustac., vol. ii., p. 528, the



specimens which I have brought home undoubtedly belong to this species which is distributed in all warm seas; with the illustrations known to me, however, some details do not quite agree. The little plate in the middle of the frontal margin and at the base of the eyes is broad, rounded at the corners and in the middle ending in a spine. The 6 rather long rounded prominences on the penultimate segment of the abdomen do not end behind in a long sharp spine, the 3 much larger prominences on the last segment are not armed with marginal teeth and the gap on the hind margin is wider and in the middle incised. This species when alive is beautifully marbled in green and yellowish tints and violet on the prong of the raptorial feet. It is rather rare at Natal Point. Length  $2\frac{1}{2}$  inches."

1880. *G. chiragra*, Miers, Ann. Nat. Hist., Ser. 5, vol. v., p. 18.

1886. *G. c.*, Brooks, Challenger Stomatopoda, Reports, vol. xvi., p. 56, pl. 15, fig. 4.

1898. *G. c.*, Borradaile, Proc. Zool. Soc. London, p. 33.

1903. *G. c.*, Lanchester, Fauna Mald. and Laccadive Arch., vol. i., pt. 4, p. 444.

Mr. Lanchester supplies many bibliographical references and gives fifteen varietal names, among which his var. *tumidus* seems best to satisfy the description above translated from Krauss.

## LARVAL SQUILLIDÆ.

GEN. ALIMA, Leach.

1818. *Alima*, Leach, Journ. Phys., vol. lxxxvi., p. 305.

1825. *A.*, Desmarest, Consid. gén. Crust., p. 253.

1871. *A.*, Claus, Abhandl. k. Gesellsch. Wiss. Göttingen, vol. xvi., p. 111.

1886. *A.*, Brooks, Challenger Stomatopoda, Reports, vol. xvi., pp. 81, &c.

1895. *A.*, Hansen, Stomatopoden Plankton-Exp., pp. 64, &c.

1910. *A.*, Giesbrecht, F. und Fl. Golfes von Neapel, vol. xxxiii., pp. 122, 147.

Giesbrecht gives as the leading feature of the *Squilla* (*Alima*) group of larvæ that the telson has four or more spines between the second lateral spine and the spine of the hinder angle.

## ALIMA BIDENS, Claus.

1871. *Alima bidens*, Claus, Abhandl. k. Gesellsch. Wiss. Göttingen, vol. xvi., p. 152, pl. 8, fig. 34.  
 1886. *A. b.*, Brooks, Challenger Stomatopoda, Reports, vol. xvi., p. 91, pl. 9, figs. 1, 2.  
 From the Cape of Good Hope.

## GEN. ERICHTHUS, Latreille.

1817. *Erichthus*, Latreille, Le Règne Animal, vol. iii., p. 43.  
 1837. *E.*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 499.  
 1910. *E.*, Giesbrecht, F. und Fl. Golfes von Neapel, vol. xxxiii., pp. 122, 148.

To distinguish *Erichthus* larvæ from the preceding *Alima* group, Giesbrecht states that they have only 1 spine between the second lateral spine and the spine of the hinder angle. It may be observed that examples of both these groups were obtained by Dr. Gilchrist in the Pieter Faure, but the discussion of the *Alima*-forms must be deferred. The genus *Erichthus* has been subdivided, so that for the larvæ of *Lysiosquilla* Brooks uses the term *Lysioerichthus*, which Hansen has modified, conveniently but perhaps not legitimately, into *Lysierichthus*.

## \* LYSIERICHTHUS DUVAUCELLII (Guérin).

- 1836? *Erichthus duvaucellii*, Guérin, Iconographie du Règne Animal, pl. 24, figs. 3, 3a. In Texte Descriptif, p. 19 (1843)  
*Erichthus duvaucellii*.  
 1895. *Lysierichthus duvaucellii*, Hansen, Stomatopoden Plankton-Exp., p. 74.

From lat. 32° 30' S., long. 15° E. Hansen explains that this is the larva of *Lysiosquilla maculata* (Fabricius).

1910. *L. d.*, Stebbing, S.A. Crustacea, pt. 5.

No. 110, sent by Dr. Gilchrist, from about 549 mm. depth, Table Mountain E. by S., distant 40 miles. The specimen agrees completely with Guérin's figure, except that the broad space between the hind corner teeth of the telson has no median indent and is quite unarmed.

## LYSIERICHTHUS TRIANGULARIS (Milne-Edwards).

1837. *Erichthus triangularis*, Milne-Edwards, Hist. Nat. Crust., vol. ii., p. 502.

1895. *Lysierichthus t.*, Hansen, Stomatopoden Plankton Exp., p. 74.  
From lat. 30° 50' S., long. 16° E.

LYSIERICHTHUS PULCHER, Hansen.

1895. *Lysierichthus pulcher*, Hansen, Stomatopoden Plankton Exp.,  
p. 74.

From lat. 32° 30' S., long. 18° E. The larval form of  
*Lysiosquilla capensis*, Hansen.

## SYMPODA.

1900. *Sympoda*, Stebbing, in Willey's Zoological Results, pt. 5,  
pp. 606, 609.  
1901. S., T. Scott, Brit. Assoc. Handbook Nat. Hist. Glasgow,  
p. 332.  
1906. S., Norman and Scott, Crustacea of Devon and Cornwall,  
p. 29.  
1908. S., Stappers, Arch. Zool. expér. et générale., vol. viii., p. 98.

Under the first reference the reasons are given for rejecting the older name Cumacea. Now that the generic name *Cuma* is abandoned, it would surely be well to avoid using it in fresh compounds. The history of the name gives it no great claim to sympathy, and, if it ever had one, it has been already almost over-employed in the formation of derivative names, such as Pseudocumidæ and Ceratocumidæ, for which should properly be read Pseudocumatidæ and Ceratocumatidæ. In *Cuma*, the Greek word for an embryo, Milne-Edwards seems to have embalmed his erroneous notion that these forms were all embryonic.

## FAMILY BODOTRIIDÆ.

1901. *Bodotriidæ*, T. Scott, Nineteenth Ann. Rep. Fishery Scotland,  
p. 273.  
1904. B., Calman, in Herdman's Pearl Fisheries, Suppl. Rep. 12,  
p. 160.  
1905. B., Calman, Siboga Exp., pt. 36, p. 3.  
1907. B., Calman, Trans. Zool. Soc., vol. xviii., pt. 1, p. 3.  
1908. B., Zimmer, Valdivia Exp., vol. viii., p. 159.

The close connexion between this family and the  
Vauntomponiidæ has been pointed out by Dr. Hansen

and Dr. Calman. Within the family itself Dr. Calman has shown that the genera *Cyclaspis* and *Bodotria* are at certain points with difficulty separable. Similarly the new species about to be described as *Iphinoë zimmeri* has mouth-organs agreeing with those figured by Sars for *Bodotria arenosa*, Goodsir, which, as I pointed out in 1893 (History of Crustacea, p. 302), is distinct from *B. scorpoides* (Montagu). Further, the new species agrees with *Bodotria* in having the first pedigerous segment inconspicuous. On the other hand, it agrees with *Iphinoë* in that the carapace is without lateral keels, the peduncles of the uropods are not longer than the rami, and the inner ramus has the second joint much longer than the first, which is apparently not the case in any hitherto accepted species of *Bodotria*.

#### GEN. BODOTRIA, Goodsir.

1843. *Bodotria*, Goodsir, Edinburgh New Philosophical Journ., vol. xxxiv., pp. 120, 128.  
 1900. *B.*, Stebbing, in Willey's Zoological Results, pt. 5, p. 610.  
 1901. *B.*, T. Scott, Nineteenth Ann. Rep. Fishery, Scotland, p. 273.  
 1905. *B.*, Calman, Fisheries, Ireland, Sci. Invest., 1904, pt. 4, p. 13  
 1907. *B.*, Calman, Trans. Zool. Soc., vol. xviii., pt. 1, p. 3.

#### \* BODOTRIA sp.

1910. *Bodotria* sp., S.A. Crustacea, pt. 5.  
 No. 83, a single small specimen, probably not adult, obtained by Dr. Gilchrist, lat. 32° 53' 30" S., long. 28° 11' 00" E.; depth 75 m.

#### GEN. IPHINOË, Bate.

1856. *Iphinoë*, Bate, Ann. Nat. Hist., Ser. 2, vol. xviii., p. 187.  
 1899. *I.*, Sars, Crustacea of Norway, vol. iii., p. 12.  
 1905. *I.*, Calman, Fisheries, Ireland, Sci. Invest., 1904, pt. 4, p. 15.  
 1908. *Iphinoë*, Zimmer, Valdivia Exp., vol. viii., pt. 3, p. 162.

#### \* IPHINOË BREVIPES, Hansen.

1895. *Iphinoë brevipes*, Hansen, Isop. Cumac. und Stomat. der Plankton Exp., vol. ii., p. 54, pl. 5, figs. 5, 5a-h.  
 Hansen's largest specimen was an adult male 8.6 mm. long, from the Gulf of Guinea.



1908. *I. africana*, Zimmer, Valdivia Exp., vol. viii., pt. 3, p. 163, pl. 37, figs. 17-33.

Zimmer describes a female specimen, 12 mm. long, from Great Fish Bay.

1910. *I. brevipes*, Stebbing, S.A. Crustacea, pt. 5.

Nos. 78, 86, 120, 127, 131, the localities being respectively lat.  $33^{\circ} 54' 15''$  S., long.  $25^{\circ} 53' 30''$  E., depth 57 m.; St. Francis Bay, lat.  $34^{\circ} 3' 20''$  S., long.  $25^{\circ} 10'$  E., depth 62 m.; off Buffalo Bay, Cape Point Lighthouse SW. by W.  $3\frac{1}{2}$  miles depth 58 m.; Sebastian Bluff NW. by N.  $3\frac{1}{2}$  miles, depth 55 m.; and Sebastian Bluff WNW. 2 miles, depth 44 m. The specimens sent by Dr. Gilchrist from these stations are well-grown males together with females carrying numerous eggs. I have not been able to detect on any the longitudinal medio-dorsal row of denticles described and figured by Zimmer as beginning behind the eye-lobe and extending half the length of the carapace, but in all other respects it seems impossible to fix on any specific character to separate our specimens either from *I. africana* or the earlier *I. brevipes*. In size, however, they as a rule greatly exceed those of the earlier description. A male from station 120 measures 15 mm. in length from front to end of the telsonic segment, and a female from the same locality is 18 mm. long. Hansen notices the extreme slenderness of this species, the uncommon length of the second joint in the third maxillipeds, and the short stumpy structure of the second leg. It is perhaps common to the genus, and is certainly not confined to it, to show a sexual distinction in the fourth thoracic segment. In the male the sides below have a lobe produced forward into a correspondent cavity of the preceding segment, whereas in the female a hind lobe of the third segment is produced backward into a cavity of the segment which follows.

\* *IPHINOË ZIMMERI*, n. sp.

Plate XLIV.

The present species has at first sight some resemblance to *Iphinoë robusta*, Hansen, from the Gulf of Guinea, but on examination any close resemblance vanishes. As in that species the pseudo-rostrum is short, and when slightly bent down presents almost a truncate front, but there are none of the median or lateral furrows which distinguish the male of *I. robusta*, and the differences

in the appendages are important, especially as regards the second peræopods and the inner ramus of the uropods.

The eyes are obscure. The first antennæ have a large geniculate first joint, exceeding in length the two following combined; the third is only a little longer than the second. The second antennæ have the long joint of the peduncle and the preceding short one thickly fringed. The branchial leaflets of the first maxillipeds are numerous. The second maxillipeds have the long second joint rather abruptly narrowed distally. In the third maxillipeds the fourth joint is produced broadly but distally pointed, the fifth joint is very much widened distally, the two following joints being narrow. The second joint of the first peræopods nearly but not quite equals in length the remainder of the limb, and is subequal in length to the small second peræopod. In that limb the second joint is widest distally, the very short third joint being abruptly narrower. The uropods have a peduncle subequal to the rami, of which the outer is fringed on the inner margin with slightly plumose setæ and tipped with three spines, one much longer than the others; the inner ramus has a first joint about half as long as the second and much stouter, fringed with ten pectinate spines, the apical much the longest; the second joint has the inner margin fringed with a dozen more or less pectinate spines, the lowest of which is the largest, at some distance from the apex; between it and the inward-pointing spine at the apex the joint tapers and carries on its inner margin 8 spinules, in this feature differing much from the male of *I. robusta*. The length of the specimen was 9 mm. That of *I. robusta* is given as 6.2 mm. A specimen of the present species, 5 mm. in length, devoid of pleopods, has uropods agreeing in armature with Hansen's species.

No. 83, obtained by Dr. Gilchrist, in lat. 32° 53' 30" S., long. 28° 11' 00" E., from depth of 75 m.

The specific name is chosen out of respect to Dr. Carl Zimmer, who has excellently worked out the results of the Valdivia Expedition for this group.

\* *IPHINOË CRASSIPES*, Hansen.

Plate XLV.

1895. *Iphinoë crassipes*, Hansen, Isop., Cumac. und Stomat. der Plankton Exp., p. 53, pl. 6, figs. 4, 4a-f.

Hansen's single specimen was a young male, only 3.2 mm. long, from the Gulf of Guinea. Nevertheless his figures and description leave practically no doubt that the fully developed

male obtained by Dr. Gilchrist belongs to the same species. The pseudo-rostrum is upturned, the distal margins in dorsal view together forming a semicircular cavity, the produced outer corners carrying convergent tufts of setæ. The eye-lobe is rounded and the eye shows ten components, two central, close together, set round with eight at small intervals. The first antennæ have the third joint considerably longer than the second and as long as the slightly geniculate third; the principal flagellum, though very short, carries a group of about eight subequal filaments on the side of the basal joint, and distally two that are much longer but that are themselves surpassed in length by a curved apical spine. The third maxillipeds are in close agreement with Hansen's figure, but, as might be expected, the armature of the uropod is very much more developed. The specimen was 8 mm. in length, and was obtained along with *Iphinoë zimmeri*.

#### GEN. CYCLASPIS, Sars.

1865. *Cyclaspis* (misprinted *Cyclapis*), Sars, Vid. Selsk. Forh. Christiania for 1864, p. 206 (81).  
 1887. *C.*, Sars, Challenger Cumacea, Reports, vol. xix., pt. 55, p. 11.  
 1893. *C.*, Stebbing, History of Crustacea, p. 302.  
 1899. *C.*, Sars, Crustacea of Norway, pt. 2, p. 15.  
 1904. *C.*, Calman, in Herdman's Pearl Fishery, Suppl. Rep. 12, p. 167.  
 1905. *C.*, Calman, Siboga Exp., pt. 36, p. 3.  
 1907. *C.*, Calman, Trans. Zool. Soc., vol. xviii., pt. 1, p. 6.  
 1908. *C.*, Zimmer, Valdivia Exp., vol. viii., p. 160.

#### CYCLASPIS SPECTABILIS, Zimmer.

1908. *Cyclaspis spectabilis*, Zimmer, Valdivia Exp., vol. viii., pp. 157, 158, 161, pl. 1.  
 Obtained by the Valdivia in lat. 35° 9' S., long. 18° 32' E. from a depth of 565 m.

#### \* CYCLASPIS sp.

1910. *Cyclaspis* sp., S.A. Crustacea, pt. 5.  
 No. 83, a specimen, female, about 6 mm. long, obtained by Dr. Gilchrist in lat. 32° 53' 30" S., long. 28° 11' 00" E., depth 75 m., belongs to the group in which the palp of the first maxillæ terminates in two setæ, thus differing from the pre-

ceding species which has only one seta in this position. The lower lip is without the strong apical teeth mentioned by Sars in his definition of this genus, and found also in some species of *Iphinoë*. In several respects the specimen agrees with the much larger *C. spectabilis*, but the carapace is hairy instead of smooth, and so many parts were clogged by extraneous matters that they were unfavourable for minute description.

GEN. EOCUMA, Marcusen.

1894. *Eocuma*, Marcusen, Sitzungsberichte der Gesellschaft naturforschende Freunde zu Berlin, p. 170, and Hilgendorf, *ibid.*, p. 171.  
 1904. *E.*, Calman, in Herdman's Pearl Fishery, Suppl. Rep. 12, p. 160.

\* EOCUMA SARSII (Kossmann).

1880. *Cyclaspis sarsii*, Kossmann, Zool. Ergebn. des rothen Meeres, vol. ii., p. 88, pl. 4, fig. 3.  
 1904. *Eocuma s.*, Calman, in Herdman's Pearl Fishery, Suppl. Rep. 12, pp. 161, 166, pl. 2, figs. 35-38.  
 1910. *E. s.*, Stebbing, S.A. Crustacea, pt. 5.  
 No. 83, a specimen, male, 7 mm. long, was obtained by Dr. Gilchrist in lat. 32° 53' 30" S., long. 28° 11' 00" E., depth 75 m. The proportions agree well with Kossmann's figure. The lateral cornua are blunt, and the longitudinal ridges that succeed the single median ridge are near together, distally curving outwards.

FAMILY LAMPROPIDÆ.

1882. *Lampropidæ*, Sars, Vidensk. Selsk. Forh. Christiania, No. 18, p. 11.  
 1887. *L.*, Sars, Challenger Cumacea, Reports, vol. xix., pt. 55, p. 25.  
 1905. *L.*, Calman, Fisheries, Ireland, Sci. Invest., 1904, p. 41.  
 1908. *L.*, Zimmer, Valdivia Exp., vol. viii., p. 169.

GEN. HEMILAMPROPS, Sars.

1882. *Hemilamprops*, Sars, Vidensk. Selsk. Forh. Christiania, No. 18, pp. 11, 56.  
 1908. *H.*, Zimmer, Valdivia Exp., vol. viii., p. 171.



## HEMILAMPROPS PELLUCIDA, Zimmer.

1908. *Hemilamprops pellucida*, Zimmer, Valdivia Exp., vol. viii., p. 172, pls. 39, 40, figs. 53-59.

Specimens taken in lat.  $35^{\circ} 9' S.$ , long.  $18^{\circ} 32' E.$ , outside the Agulhas Bank, from a depth of 564 m.

## FAMILY DICIDÆ, n.

For the characteristics see the discussion under the new genus, to receive which the new family is proposed.

## GEN. DIC, n.

Third and fourth pedigerous segments of the trunk dorsally coalesced. Telson elongate, almost parallel-sided to the short triangular apex, which covers a pair of small anal valves. First antennæ with large first joint, the flagella small, the accessory flagellum two-jointed, minute. Mandibles with large spine-row, molar well developed, accessory cutting-plate only on one member of the pair. First maxillæ with bisetose palp. First maxillipeds with row of strongly pectinate spines bordering the antepenultimate joint; the branchial apparatus apparently without gill-sacs. Third maxillipeds with second joint much dilated distally and third joint exceptionally large. First and second peræopods with well-developed swimming-branches; third and fourth peræopods with these exopods conspicuous, but devoid of natatory setæ. Pleon of male showing no trace of pleopods. Inner branch of uropods three-jointed.

In the coalescence of the third and fourth trunk-segments this genus agrees with *Diastylopsis*, S. I. Smith; the remarkable telson scarcely differs from that of the species which Dr. Calman has provisionally named *Diastylis tubulicauda*; the lips, mandibles, first and second maxillæ, and to a great extent the first and second maxillipeds, resemble those structures as figured by Professor Sars for *Hemilamprops rosea* (Norman); the distally much-dilated second joint of the third maxillipeds occurs in *Pachystylis rotundata*, Hansen, in *Paradiastylis brachyura*, Calman, and elsewhere. If the affinities of the new genus may be considered to connect it either with the Lampropidæ or the Diastylidæ, in favour of the former alliance it may be said that there the branchial elements are scattered and much less fully developed than in the Diastylidæ, and pleopods are sometimes wholly wanting in the male as well as the female. On the other hand, the inner ramus of the uropods is said to be always

longer than the outer in the Lampropidæ, whereas in our species the two rami are equal, and in *D. tubulicauda* the inner ramus is much the shorter. Dr. Calman says of the last-named species: "The characters of this peculiar form do not coincide with those of any of the admitted genera of Diastylidæ." I venture to think that it will prove to be a species of the new genus here instituted, and that the unique characters of the third maxillipeds and the telson justify the naming of a new family Dicidæ. In *D. tubulicauda* "the third and fourth thoracic somites are quite distinct from each other," and the third maxillipeds have not been described.

The generic term here proposed is the literal Latin rendering of Say, the name of the American naturalist who, by his *Diastylis* in 1818, was the first to include any of the Sympoda in a distinctive genus, a scientific feat deserving honourable recognition.

\* DIC CALMANI, n. sp.

Plates XLVI.B and XLVII.

The whole integument is covered with hexagonal markings, the hexagons irregular and unequal. Of the five exposed trunk-segments the first is very short, the second and fifth not very long, the dorsally coalesced third and fourth with well-marked lateral sutures. The pleon is composed of six segments not very unequal, the fifth very little longer than the sixth, and a remarkably long telson. This equals in length the fourth, fifth, and sixth segments combined, and tapers very slightly to the little triangular apex, which is fringed with ten denticles, two of them apical. The dark contents of the intestinal canal in the specimen examined extended in a broad stripe to the valves attached at the base of the triangular apex.

Of the eye I cannot speak with certainty. At the apex of the true rostrum seen laterally a bright transparent tubercle gave the appearance of an ocular lens (or lenses), but the real character remained uncertain on dissection. The first antennæ have a peduncle of three stout joints, the first the longest. Both flagella are very small, the accessory one minute, two-jointed, the principal four-jointed, the third joint tipped with two filaments longer than the flagellum. The more slender second antennæ have a peduncle of three short and two fairly long joints, with an indistinctly five-jointed flagellum, about once and a half as long as the fifth joint of the peduncle. This appendage I take to be the partially developed antenna of a male specimen.

Upper lip faintly emarginate. Lower lip with subacute, inward pointing, setulose process at the apex of each lobe. One mandible

with quadridentate cutting edge, tridentate accessory plate, thirteen spines, and strong molar; the other with tridentate narrowly curved cutting plate, ten spines, and strong molar. The pectination of the spines differs on the two mandibles. The branchial apparatus of the first maxillipeds, so far as I could make out, has no digitiform or leaf-like gill elements. The fringe of spines on the antepenultimate joint of the endopod is remarkable for the breadth of the pectinate ends of four out of the six spines. The third maxillipeds at the dilated distal end of the long second joint have a set of unequal teeth at the apex of the inner margin and several sparsely plumose setæ at the somewhat produced apex of the sinuous outer margin; the third joint, instead of being as is usual rather small, is here at its base about as broad as the distal margin of the second joint, and its broadly rounded summit reaches the base of the sixth joint, thus constituting a feature not hitherto described for any species; the short fourth joint is attached in a sinus of the inner margin of the third, much nearer its base than its apex; the three remaining joints are narrow, much longer than broad.

The first peræopods are between two and three times as long as the second, which are only subequal in length to the fifth pair, though with a much larger basal joint, and an exopod not much smaller than that of the first pair. In the third and fourth peræopods, the exopods do not reach the end of the basal joint; they are devoid of setæ and have only two minute apical setules. As the second antennæ seem to be incompletely developed, the same may be the case with these exopods. In a very small specimen only rudiments of them could be with difficulty discerned.

The uropods, apart from their apical spines, are little longer than the telson; the peduncle is more than half as long as the telson. The outer ramus has on the outer margin of its second joint four spines with bifid apices, four small spines on its inner margin, two unequal spines on its apex, one of them elongate; the inner ramus has on its inner margin four spines to the first joint, three to the second, and three to the third followed by a long apical spine, which is not so long as the longer of the apical couple on the outer ramus.

Length of the specimen here described, in slightly bent position, 5 mm. A specimen 2.75 mm. long was devoid of the fifth peræopods.

Locality, lat. 32° 53' 30" S., long. 28° 11' 00" E., from depth of 75 m. No. 83, obtained by Dr. Gilchrist.

The specific name is given out of respect to Dr. W. T. Calman, who has made so many valuable contributions to our knowledge of this group.

## FAMILY DIASTYLIDÆ.

1871. *Diastylidæ*, Sars, Kongl. Svenska Vet. Akad. Handlingar, vol. ix., No. 13, p. 5.  
 1887. *D.*, Sars, Challenger Cumacea, Reports, vol. xix., pt. 55 pp. 7, 43.  
 1908. *D.*, Zimmer, Valdivia Exp., vol. viii., p. 181.

## GEN. DIASTYLIS, Say.

1818. *Diastylis*, Say, J. Ac. Sci. Philad., vol. i., p. 313.  
 1908. *D.*, Zimmer, Valdivia Exp., vol. viii., p. 181.

## DIASTYLIS HEXACEROS, Zimmer.

1908. *Diastylis hexaceros*, Zimmer, Valdivia Exp., vol. viii., p. 187, pl. 44, figs. 93-95.  
 A specimen, female, was obtained in lat. 39° 9' S., long. 18° 32' 8" E., south of Cape Agulhas, South Africa, outside the Agulhas Bank, in a depth of 565 m.

## \* DIASTYLIS ALGOÆ, Zimmer.

1908. *Diastylis algoæ*, Zimmer, Valdivia Exp., vol. viii., p. 188, p's. 44, 45, figs. 96-108.  
 Two specimens, female, were obtained in Algoa Bay, from a depth of 40 m.  
 1910. *D. a.*, Stebbing, S.A. Crustacea, pt. 5.  
 No. 79, lat. 33° 49' S., long. 25° 56' E., depth 44 m.; No. 127, Sebastian Bluff, NW. by N.  $\frac{1}{2}$  N.  $3\frac{1}{2}$  miles, depth 55 m.; and No. 128, Sebastian Bluff, W. by N.  $\frac{1}{2}$  N. 4 miles, depth 51 m.; are stations from which specimens of this species were sent by Dr. Gilchrist.

## ISOPODA.

1817. *Isopoda*, Latreille, Nouveau Dictionnaire d'Histoire Naturelle, vol. xvi., p. 140, and Le Règne Animal, vol. iii., pp. xiv, 7, 48.  
 1896. *I.*, Sars, Crustacea of Norway, vol. ii.

## ISOPODA ANOMALA.

1881. *Chelifera*, Sars, Arch. Naturv. Kristian., vol. vii.  
 1895. *Tanaidacea*, Hansen, Isop. Plankton Exp., vol. ii., p. 49.



1902. *Isopoda anomala*, Stebbing, S.A. Crustacea, pt. 2, p. 48.  
 1909. *Tanaidacea*, Calman, Crustacea, in Lankester's Treatise on Zoology, pt. 7, fasc. 3, p. 190.

If the name of this group is to be founded on one of the included genera, it should be Apseudacea, since *Apseudes*, Leach, is much anterior to *Tanais*, Audouin and Milne-Edwards.

## FAMILY APSEUDIDÆ.

1881. *Apseudidæ*, Sars, Arch. Naturv. Kristian., vol. vii., pp. 6, 8.

### GEN. APSEUDES, Leach.

1813. *Apseudes*, Leach, Edinb. Encycl., vol. vii., p. 404.  
 1902. *A.*, Stebbing, S.A. Crustacea, pt. 2, p. 48.

### \* APSEUDES GROSSIMANUS, Norman.

1870. *Apseudes grossimanus*, Norman, Proc. Royal Soc., No. 125, p. 157.  
 1902. *A. g.*, Stebbing, S.A. Crustacea, pt. 2, p. 48.  
 No. 104, sent by Dr. Gilchrist, from 229 m. depth, Lion's Head S. 82° E., distant 27 miles, and No. 111, from 448 m. depth, Table Mountain, distant 41 miles east.

## ISOPODA GENUINA.

### TRIBE FLABELLIFERA.

## FAMILY ANTHURIDÆ.

### GEN. ANTHURA, Leach.

1813. *Anthura*, Leach, Edinb. Encyc., vol. vii., p. 387 (*Anthoura*, a misprint?), pp. 404, 433, 435.  
 1886. *A.*, Norman and Stebbing, Trans. Zool. Soc. London, vol. xii., pt. 4, p. 121.

### ANTHURA PUNCTATA, Stimpson.

1855. *Anthura punctata*, Stimpson, Proc. Acad. Nat. Sci. Philad., vol. vii., p. 392.  
 "Anterior segments elongated and slender, the sixth

broadest, the seventh very short, and bearing a much smaller pair of legs than the others. Head scarcely narrower than the first thoracic segment, with a slight rostrum, and large black eyes at the anterior corners; the inferior antennæ largest. The first three pairs of legs have much larger hands than the posterior ones; those of the first pair being somewhat shorter and thicker than the others. Color greyish above, from the numerous minute, black punctations; pale yellowish or whitish below. Length, 0·8 inch; breadth, 0·8 inch [evidently intended for 0·08 inch]. Found among Gorgoniæ in the coral-line zone. *Hab.* Cape of Good Hope, at Simon's Bay."

ANTHURA CATENULA, Stimpson.

1855. *Anthura catenula*, Stimpson, Proc. Acad. Nat. Sci. Philad., vol. vii., p. 393.

"Very slender, whitish, with a hollow square of black on each segment above, giving a chain-like appearance to the back; head smaller than the first thoracic segment; antennæ rather long; eyes black, at the anterior corners of the first square of color; anterior pair of legs short, thick, and with strong, subcheliform hands; remaining legs slender. Abdomen slightly depressed, with a black transverse bar, and a few symmetrically arranged black spots posteriorly. Length, 0·7 inch; breadth [breadth], 0·06 inch. Found under stones at low-water mark. *Hab.* Cape of Good Hope, at Simon's Bay."

ANTHURA LÆVIGATA, Stimpson.

1855. *Anthura lævigata*, Stimpson, Proc. Acad. Nat. Sci. Philad., vol. vii., p. 393.

"Body smooth and shining, transparent white, except a few crimson spots at the extremities. Head narrow; antennæ small, flattened; eyes minute, red. First three pairs of legs stout, with equal, subcheliform hands; posterior legs slender. Abdomen with its posterior funnel-shaped cavity large, and with its anterior segments well-marked. Length, 1 inch; breadth, 0·2 inch. On sandy bottoms in the circumlittoral zone. *Hab.* Cape of Good Hope, at Simon's Bay."

Other members of this family were obtained by the "Pieter Faure," but they are in need of fuller discussion than can here be conveniently supplied.

## FAMILY EURYDICIDÆ.

1880. *Cirolanidæ*, Harger, Rep. U.S. Fish. Comm. for 1878, p. 304.  
 1905. *Eurydicidæ*, Stebbing, Herdman's Ceylon Pearl Fish., pt. 4,  
 Suppl. Rep. 23, p. 10.  
 1908. *E.*, Stebbing, S.A. Crustacea, pt. 4, p. 45.

## GEN. EURYDICE, Leach.

1815. *Eurydice*, Leach, Trans. Linn. Soc. London, vol. xi.,  
 p. 370.  
 1890. *E.*, Hansen, Cirolanidæ, p. 126, in Vidensk. Selsk. Skr., Ser. 6,  
 vol. v., p. 362.

## EURYDICE LONGICORNIS (Studer).

1883. *Cirolana longicornis*, Studer, Abhandl. Königl. Akad. Wiss.  
 Berlin, 1882, p. 28, pl. 2, fig. 15 *a-c*. Off Table Bay, in  
 91 m. depth.  
 1890. *Eurydice l.*, Hansen, Cirolanidæ, p. 139 (375).

## GEN. CIROLANA, Leach.

1818. *Cirolana*, Leach, Dict. Sci. Nat., vol. xii., p. 347.  
 1890. *C.*, Hansen, Cirolanidæ, p. 83 (319).  
 1902. *C.*, Stebbing, S.A. Crust., pt. 2, p. 49.

## CIROLANA HIRTIPES, Milne-Edwards.

1840. *Cirolana hirtipes*, Milne-Edwards, Hist. Nat. Crust., vol. iii.,  
 p. 236, pl. 31, figs. 25, 26.  
 "From the Cape of Good Hope."  
 1890. *C. h.*, Hansen, Cirolanidæ, p. 90 (326), pl. 1, figs. 2-2*g*.  
 "Table Bay at the Cape." Krauss mentions this species,  
 only to say that he had not found it.

## \* CIROLANA SULCATA, Hansen.

1890. *Cirolana sulcata*, Hansen, Cirolanidæ, p. 100 (336), pl. 2,  
 figs. 5-5*e*.  
 "Simon's Bay at the Cape."  
 1902. *C. s.*, Stebbing, S.A. Crustacea, pt. 2, p. 53.  
 Sent by Dr. Gilchrist, No. 140. "Somerset West, shore;  
 from 'Red Bait.'"

## \* CIROLANA VENUSTICAUDA, Stebbing.

1902. *Cirolana venusticauda*, Stebbing, S.A. Crustacea, pt. 2, p. 49, pl. 9.

Sent by Dr. Gilchrist, No. 140, "from 'Red Bait' a large Ascidian), Somerset West, shore," and No. 141 from "Table Bay." This is probably the species which Krauss (Die Südafrikanischen Crustaceen, p. 66, 1843), took in Table Bay, and (in my opinion wrongly) identified with *Cirolana sculpta*, Milne-Edwards, from Malabar.

## \* CIROLANA FLUVIATILIS, Stebbing.

1902. *Cirolana fluviatilis*, Stebbing, S.A. Crustacea, pt. 2, p. 52.

No. 81, sent by Dr. Gilchrist, from "Two miles up the Buffalo River."

## GEN. CONILORPHEUS, Stebbing.

1905. *Conilorpheus*, Stebbing, Herdman's Ceylon Pearl Fish., pt. 4, Suppl. Rep. 23, pp. 11, 13.

## \* CONILORPHEUS SCUTIFRONS, Stebbing.

1908. *Conilorpheus scutifrons*, Stebbing, S.A. Crustacea, pt. 4, p. 46, pl. 31, n. Ann. S.A. Mus., vol. vi., pt. 1.

No. 89, sent by Dr. Gilchrist. "Dredged between Bird Island and mainland," between 18 and 29 m. depth.

## FAMILY ÆGIDÆ.

1879. *Ægidæ*, Schiödte and Meinert. Naturhist. Tidsskrift, Ser. 3, vol. xii., p. 325.  
1890. *Æ.*, Hansen, Cirolanidæ, pp. 58, 79 (294, 315).

## GEN. ÆGA, Leach.

1815. *Æga*, Leach, Trans. Linn. Soc. London, vol. xi., p. 369.  
1879. *Æ.*, Schiödte and Meinert, Naturhist. Tidsskr., Ser. 3, vol. xii., p. 334.  
1890. *Æ.*, Hansen, Cirolanidæ, p. 80 (316).

## ÆGA WEBBII (Guérin).

1836. *Pterelas webbii*, Guérin, Magasin de Zoologie, vol. vi., Classe 7, pl. 20, fig. 1 a-e.



1879. *Æga w.*, Schiödte and Meinert, Naturhist. Tidsskr., Ser. 3, vol. xii., p. 347, pl. 10, figs. 1-4.  
 "Specimen taken at the Cape of Good Hope."

GEN. ROCINELA, Leach.

1818. *Rocinela*, Leach, Dict. Sci. Nat., vol. xii., pp. 348, 349.

\* ROCINELA DUMERILII (Lucas).

1849. *Acherusia dumerilii*, Lucas, Crust. Algérie, p. 79, pl. 8, fig. 31.  
 1879. *Rocinela d.*, Schiödte and Meinert. Naturhist. Tidsskr., Ser. 3, vol. xii., p. 391, pl. 12, figs. 4-6.  
 1902. *R. d.*, Stebbing, S.A. Crustacea, pt. 2, p. 53.  
 No. 112, sent by Dr. Gilchrist. Dredged from depth of 303 m., Vasco de Gama Pt. S. 75° E., distant 13½ miles.

FAMILY CYMOTHOIDÆ.

1867. *Cymothoidæ*, Bate and Westwood, British Sessile-eyed Crustacea, vol. ii., p. 274.  
 1890. *C.*, Hansen, Cirolanidæ, pp. 80, 170 (316, 406).  
 1900. *C.*, Stebbing, S.A. Crustacea, pt. 1, p. 55.

GEN. NEROCILA, Leach.

1818. *Nerocila*, Leach, Dict. Sci. Nat., vol. xii., p. 351.  
 1902. *N.*, Stebbing, S.A. Crustacea, pt. 2, p. 55.

\* NEROCILA CEPHALOTES, Schiödte and Meinert.

1881. *Nerocila cephalotes*, Schiödte and Meinert, Naturhist. Tidsskr., Ser. 3, vol. xiii., p. 60, pl. 4, figs. 16-18.  
 From Cape of Good Hope and Cape Agulhas.  
 1902. *N. c.*, Stebbing, S.A. Crustacea, pt. 2, p. 55.  
 No. 93, sent by Dr. Gilchrist. Trawled from depth of 64 m., Cape St. Blaize N., distant 4¼ miles.

GEN. ANILOCRA, Leach.

1818. *Anilocra*, Leach, Dict. Sci. Nat., vol. xii., p. 350.  
 1900. *A.*, Stebbing, S.A. Crustacea, pt. 1, p. 56.

## \* ANILOCRA CAPENSIS, Leach.

1818. *Anilocra capensis*, Leach, Dict. Sci. Nat., vol. xii., p. 350.

“Inhabits the seas of the Cape of Good Hope.”

1881. *A. c.*, Schiödte and Meinert, Naturhist. Tidsskr., Ser. 3, vol. xiii., p. 146, pl. 10, figs. 4, 5.

“From the Cape of Good Hope, obtained by Captain Corneliusen from mouth and gills of the fish called Red Hottentot (*Sargus Hottentottus*, Sm.??)” and one “taken at Cape Town by Mr. De Vylder.” Schiödte and Meinert attribute the species to Milne-Edwards, although that author quotes Leach’s description without any addition.

1900. *A. c.*, Stebbing, S.A. Crustacea, pt. 1, p. 57.

No. 1A, sent by Dr. Gilchrist, from Simon’s Bay, Cape of Good Hope.

## GEN. CTEATESSA, Schiödte and Meinert.

1883. *Cteatessa*, Schiödte and Meinert, Naturhist. Tidsskr., Ser. 3, vol. xiii., pp. 289, 296.

## CTEATESSA RETUSA, Schiödte and Meinert.

1883. *Cteatessa retusa*, Schiödte and Meinert, Naturhist. Tidsskr., Ser. 3, vol. xiii., p. 297, pl. 11, figs. 11–13.

“Taken by Vahlberg near Port Natal.” An earlier mention is made of the species in regard to the specimen taken by Peters at Mozambique, see Hilgendorf, Monatsberichte der Kön. Preussischen Akad. Wiss. zu Berlin, p. 849, 1879, “*Cymothoa* (*Ceratothoa*) *retusa*, Schiödte et Meinert, sp. n.”

## GEN. MEINERTIA, Stebbing.

1893. *Meinertia*, Stebbing, History of Crustacea, p. 354.

This is the *Ceratothoa* of Schiödte and Meinert, 1883, but not of Dana, 1853.

## \* MEINERTIA IMBRICATA (J. C. Fabricius).

1787. *Oniscus imbricatus*, Fabricius, Mantissa Insectorum, vol. i., p. 241.

1818. *Cymothoa banksii*, Leach, and *C. trigonocephala*, Leach, Dict. Sci. Nat., vol. xii., p. 353.

1843. *C. banksii*, Krauss, Die Südafrikanischen Crustaceen, p. 66.  
Taken in Table Bay by Baron von Ludwig.

1883. *Ceratothoa banksii*, Schiödte and Meinert, Naturhist. Tidsskr., Ser. 3, vol. xiii., p. 340, pl. 14, figs. 6-21.

"Frequently taken at the Cape of Good Hope in the mouth of the 'Red Hottentot,' together with *Anilocra Capensis*;" also taken at Port Natal. Probably *Ceratothoa trigonocephala* of the same authors, p. 358, pl. 16, figs. 1-7, is a synonym. The authors assign to *banksii* "*frons obtusa*," but "*frons acuta vel acutiuscula*" to *trigonocephala*. Leach, in his brief description, gives to *banksii* "tête très-acuminée, à partir du milieu, à l'extrémité," and to *trigonocephala* "tête triangulaire." The joint authors record the finding of their *trigonocephala* at Port Natal by Vahlberg.

1900. *Meinertia imbricata*, Stebbing, S.A. Crustacea, pt. 1, p. 58.

No. 1, sent by Dr. Gi chris t, "From the mouth of fish, Kalk Bay"; No. 19, another specimen.

#### GEN. CINUSA, Schiödte and Meinert.

1884. *Cinusa*, Schiödte and Meinert, Naturhist. Tidsskr., Ser. 3, vol. xiv., pp. 223, 312.

#### CINUSA TETRODONTIS, Schiödte and Meinert.

1884. *Cinusa tetrodontis*, Schiödte and Meinert, Naturhist. Tidsskr., Ser. 3, vol. xiv., p. 313, pl. 12, figs. 3-7.

Taken at Cape of Good Hope and in Simon's Bay by Hansen and others, generally in mouth or jaws of *Tetrodon honckenii* (Bloch).

#### GEN. LIVONECA, Leach.

1818. *Livoneca*, Leach, Dict. Sci. Nat., vol. xii., p. 351.

#### LIVONECA RAYNAUDII, Milne-Edwards.

1840. *Livoneca raynaudii*, Milne-Edwards, Hist. Nat. Crust., vol. iii., p. 262.

"Found near the Cape of Good Hope by M. Raynaud."

1884. *L. r.*, Schiödte and Meinert, Naturhist. Tidsskr., Ser. 3, vol. xiv., pp. 343, 367, pl. 15, figs. 9-13.

There is nothing in Leach's account of his "*Livoneca Rafineskii*," to distinguish it from this species. Leach clearly means that in *rafineskii* the uropods do not extend beyond the telsonic segment, while in *raynaudii* Milne-Edwards lays stress on the fact that the telsonic segment

extends beyond the uropods. He seems to have attributed a wrong sense to the expression used by Leach. As, however, the place of origin is not known for the species named by Leach, the name remains obscure.

### FAMILY LIMNORIIDÆ.

1880. *Limnoriidæ*, Harger, Rep. U.S. Fish. Comm. for 1878, p. 371.  
 1904. *L.*, Stebbing, Gardiner's Fauna Mald. Laccad. Archipelagoes, vol. ii., pt. 3, p. 713.

### GEN. LIMNORIA, Leach.

1814. *Limnoria*, Leach, Edinb. Encycl., vol. vii., p. 433.  
 1908. *L.*, Stebbing, S.A. Crustacea, pt. 4, p. 50.  
 1909. *L.*, Richardson, Pr. U.S. Mus., vol. xxxvii., p. 95.

### \* LIMNORIA LIGNORUM (J. Rathke).

1799. *Cymothoa lignorum*, J. Rathke, Naturh. Selsk. Skr., vol. v., p. 101, pl. 3, fig. 14.  
 1905. *Limnoria l.*, H. Richardson, Bulletin U.S. Nat. Mus., No. 54, p. 269, figs. 279-281.  
 1905. *L. l.*, Hansen, Q. J. Microsc. Sci., vol. xlix., pt. 1, p. 75.  
 1908. *L. l.*, Stebbing, S.A. Crustacea, pt. 4, p. 50, in Ann. S.A. Mus., vol. vi., pt. 1.

"The specimens sent me from the Cape, together with some of the timber they had been perforating, were obtained by Thomas Reeve, Esq., at Port Elizabeth."

### FAMILY SPHÆROMIDÆ.

1847. *Sphæromidæ*, White, List of Crust. in Brit. Mus., p. 102.  
 1902. *S.*, Stebbing, S.A. Crustacea, pt. 2, p. 64, and 1908, pt. 4, p. 48.  
 1905. *S.*, Hansen, Quarterly Journ. Microsc. Sci., vol. xlix., pt. 1, p. 69.  
 1908. *S.*, Budde-Lund, Voeltzkow's Reise in Ostafrika, Isopoda, in vol. ii., p. 203.  
 1909. *S.*, H. Richardson, Proc. U.S. Nat. Mus., vol. xxxvii., p. 89.



## GEN. SPHÆROMA, Bosc.

1802. *Sphæroma*, Bosc. Hist. Nat. Crust., vol. ii., p. 182.1908. *S.*, Stebbing, S.A. Crustacea, pt. 4, p. 49.

## \* SPHÆROMA TEREBRANS, Bate.

1866. *Sphæroma terebrans*, Bate, Ann. Nat. Hist., Ser. 3, vol. xvii., p. 28, pl. 2, fig. 5.1904. *S. t.*, Stebbing, Spolia Zeylanica, vol. ii., pt. 5, p. 16, pl. 4.1908. *S. t.*, Stebbing, S.A. Crustacea, pt. 4, p. 49.

Specimens sent by Dr. Gilchrist from Gamtoos River bridge, at which their boring operations had been carried on.

## SPHÆROMA TRISTENSE, Leach.

1818. *Sphæroma tristense*, Leach, Dict. Sci. Nat., vol. xii., p. 345.1843. *S. t.*, Krauss, Die Südafrik. Crust., p. 65.

Taken in Table Bay. Krauss says: "The two longish tubercles on the terminal segment and the blunt end of the pleon determine me to regard my specimens as belonging to this species very briefly described by Leach; at any rate they belong to that section of the genus in which the last two segments of the peræon are shaped like the preceding; but all the segments have in the middle four very obscure tubercles and on the sides a similar intumescence. The branches of the uropods have smooth margins and are just as long as the apex of the pleon." Length 5.2 lines.

1905. *S. t.*, Hansen, Quarterly Journ. Microsc. Sci., vol. xlix., pt. 1, p. 117.

Hansen says of this and several other species hitherto included in this genus, that they "do not belong to *Sphæroma*, but I cannot refer them to genera, because the descriptions and figures are too defective in some respects."

## SPHÆROMA JURINII, Audouin.

1825. *Sphæroma jurinii*, Audouin, Explication sommaire des Planches, for Savigny's Égypte, pl. xii., fig. 2.

Savigny's figure agrees with Leach's *S. tristense* in having a very short seventh segment of the peræon and the telsonic segment ending abruptly in an obtuse point, but the obscure elongate tubercles at its base are wanting.

1843. *S. j.*, Krauss, Die Südafrik. Crust., p. 65.

Specimens from Table Bay, attaining a length of 5 lines.

1905. *S. j.*, Hansen, *loc. cit.*, makes the same remark on this species as on *S. tristense*.

GEN. EXOSPHEROMA, Stebbing.

1900. *Exosphæroma*, Stebbing, Proc. Zool. Soc. London, p. 553.  
 1902. *E.*, part, Stebbing, S.A. Crustacea, pt. 2, p. 54.  
 1905. *E.*, Hansen, Quarterly Journ. Microsc. Sci., vol. xlix., pt. 1, pp. 103, 118.  
 1910. Stebbing, J. Linn. Soc. London, vol. xxxi., p. 220.

\* EXOSPHEROMA GIGAS (Leach).

1818. *Sphæroma gigas*, Leach, Dict. Sci. Nat., vol. xii., p. 346.  
 1900. *Exosphæroma g.*, Stebbing, Proc. Zool. Soc. London, p. 553, pl. 39.  
 1902. *E. g.*, Stebbing, S.A. Crustacea, pt. 2, p. 69.

No. 81A, sent by Dr. Gilchrist, from two miles up Buffalo River. No. 132, sent by Dr. Gilchrist, taken in Sebastian Bay on beach at low tide, represents the *Exosphæroma lanceolatum* (White), the name of which presents a difficulty, since this may have been the form originally described by Leach as *Sphæroma gigas*, in which case the species with a round-ended telson will require a new name. The lanceolate form here noted has the telson medio-longitudinally subcarinate and ends subacutely; the inner ramus of the uropods is truncate. An ovigerous female measures 10 mm.

EXOSPHEROMA STIMPSONI (Heller).

1866. *Sphæroma stimpsoni*, Heller, Novara Crustacea, p. 139, pl. 12, fig. 10.  
 From the Cape.  
 1905. *Exosphæroma stimpsonii*, Hansen, Q. J. Microsc. Sci., vol. xlix., pt. 1, pp. 116, 118.

As Hansen has had at command specimens in the Copenhagen Museum, I accept his ruling that this species belongs to *Exosphæroma*, but it conflicts with the characters which Hansen himself (*loc. cit.*, p. 103) assigns to the genus, "Last thoracic segment unarmed in both sexes: end of abdomen at most somewhat produced, but not acute," while Heller says of this species that the hind margin of the seventh segment of the thorax is produced into a conical process, and that the telsonic segment has an acute apex.

## EXOSPHEROMA (?) SCABRICULUM (Heller).

1866. *Sphæroma scabriculum*, Heller, Novara Crustacea, p. 141, pl. 12, fig. 11.

From the Cape.

1905. *Sphæroma scabriculum*, Hansen, Q. J. Microsc. Sci., vol. xlix. pt. 1, pp. 102, 103, 116.

Hansen says: "In a species from Simon's Bay, at Cape, closely allied to or identical with *Sphæroma scabriculum* (Hell.), the end of abdomen in the female is as in *Exosphæroma*, while in the male a notch, as in the male *Dynamenella* (compare the diagnosis below) is observed; the specimen described by Heller is evidently a male. The female of the species seen by me cannot be separated from *Exosphæroma*, while the structure in the male alluded to is very curious." Further on he suggests that this species demands either an amalgamation of some existing genera or the institution of some new ones.

## GEN. PARASPHÆROMA, Stebbing.

1902. *Parasphæroma*, Stebbing, S.A. Crustacea, pt. 2, p. 70.  
1905. *P.*, Hansen, Q. J. Microsc. Sci., vol. xlix., pt. 1, pp. 1, 91, 111.

This genus is placed by Hansen in the section *Campecopeini* of his group *Sphæromina platybranchiata*.

## \* PARASPHÆROMA PROMINENS, Stebbing.

1902. *Parasphæroma prominens*, Stebbing, S.A. Crustacea, pt. 2, p. 70, pl. 13.

Nos. 114, 115, sent by Dr. Gilchrist, from a depth of 304 m., Vasco de Gama Peak S. 75° E., distant 13½ miles.  
No. 14553, sent by Dr. Péringuey, from a depth of 329 m., 13 miles SE. of Cape Point.

1905. *P. p.*, Hansen, Q. J. Microsc. Sci., vol. xlix., pt. 1, p. 78.

## GEN. CYMODOCE, Leach.

1814. *Cymodoce*, Leach, Edinb. Encycl., vol. vii., p. 433.  
1902. *C.*, Stebbing, S.A. Crustacea, pt. 2, p. 73.  
1905. *C.*, Hansen, Q. J. Microsc. Sci., vol. xlix., pt. 1, pp. 70, 72, 119.

## \* CYMODOCE AMPLIFRONS (Stebbing).

1902. *Exosphæroma amplifrons*, Stebbing, S.A. Crustacea, pt. 2, p. 64, pl. 11.

No. 45, sent by Dr. Gilchrist, from Algoa Bay, between Bird Island and mainland; depth between 18 and 29 m.

1905. *Cymodoce a.*, Hansen, Q. J. Microsc. Sci., vol. xlix., pt. 2, p. 122.

\* CYMODOCE VALIDA (Stebbing).

1902. *Exosphæroma validum*, Stebbing, S.A. Crustacea, pt. 2, p. 66, pl. 12A.

1902. *Exosphæroma setulosum*, Stebbing, S.A. Crustacea, pt. 2, p. 68, pl. 12B.

No. 45, sent by Dr. Gilchrist, from Algoa Bay, between Bird Island and mainland; depth between 18 and 29 m.

1905. *Cymodoce valida*, Hansen, Q. J. Microsc. Sci., vol. xlix., pt. 2, pp. 118, 122.

Hansen determines that the names above given refer respectively to the young male and the female of a species of *Cymodoce*.

\* CYMODOCE UNCINATA, Stebbing.

1902. *Cymodoce uncinata*, Stebbing, S.A. Crustacea, pt. 2, p. 73, pl. 14.

Sent by Dr. Gilchrist, No. 77, from a depth of 40 m. in Table Bay, and No. 116, 55 m. in Buffalo Bay.

1905. *C. u.*, Hansen, Q. J. Microsc. Sci., vol. xlix., pt. 1, p. 122.

GEN. CYMODOCELLA, Pfeffer.

1887. *Cymodocella*, Pfeffer, Jahrbuch wiss. Anstalten zu Hamburg, vol. iv., pp. 18, 20, 69.

1905. *C.*, Hansen, Q. J. Microsc. Sci., vol. xlix., pt. 1, pp. 80, 107, 126.

CYMODOCELLA ALGOENSIS (Stebbing).

1875. *Sphæroma algoense*, Stebbing, Ann. Nat. Hist., Ser. 4, vol. xv., p. 186, pl. 15A, figs. 3, 3a.

It is probable that this minute Sphæromid came from Algoa Bay, but some uncertainty exists, because members of the Australian fauna were included in the collection from which it was extracted. It appears to be very nearly related to *Cymodocella tubicauda*, Pfeffer, 1887, from South Georgia.

1905. *Cymodocella algoensis*, Stebbing, Herdman's Pearl Fish., Suppl. Rep. 23, p. 30.

1905. *C. a.*, Hansen, Q. J. Microsc. Sci., vol. xlix., pt. 1, p. 126.



## GEN. CYCLOIDURA, Stebbing.

1874. *Cyclura* (preocc.), Stebbing, J. Linn. Soc., vol. xii., p. 146.  
 1878. *Cycloidura*, Stebbing, Ann. Nat. Hist., Ser. 5, vol. i.,  
 p. 36.  
 1905. *Zuzara*, Hansen, Q. J. Microsc. Sci., vol. xlix., pt. 1, p. 104.

## CYCLOIDURA (?) PERFORATA (Milne-Edwards).

1849. *Sphæroma perforata*, Milne-Edwards, Hist. Nat. Crust., vol. iii.,  
 p. 211.

Specimen found at St. Paul by Quoy and Gaimard, length  
 3 lines.

1843. *S. p.*, Krauss, Südafrik. Crust., p. 65.

"In the Algæ of Natal Bay. Length 5·2 lines."

1905. *Dynamenella* (?) *p.*, Hansen, Q. J. Microsc. Sci., vol. xlix., pt. 1,  
 pp. 117, 126.

Hansen assigns this species to *Dynamenella* with hesitation. He does not notice the fact that Milne-Edwards describes the seventh thoracic segment as armed with a long and strong median tooth projecting over the abdomen. This would seem to exclude the species from *Dynamenella*, defined as having "both sexes rather similar in aspect, without real processes," while this process, and the "very large, oval, round-ended rami" of the uropods indicate at least a near approach to the genus *Cycloidura*. According to Hansen this is a synonym of *Zuzara*, instituted by Leach in 1818. But *Zuzara* is far from clearly established. Leach, in the Dict. Sci. Nat., vol. xii., p. 341, couples it with *Sphæroma* as having the body capable of globation and the last segment of the abdomen entire, and separates it from *Sphæroma* as having the outer ramus of the uropod larger than the inner. On p. 344, however, he states that *Zuzara* has the last segment of the abdomen emarginate at its extremity, with a slight projection from the bottom of the emargination. He describes two species, both with the seventh thoracic segment produced backwards, and the first, *Z. semipunctata*, as having the outer ramus of the uropod ending abruptly in a point. But Milne-Edwards avers, from personal inspection of the original specimen, that it is not the seventh but the sixth thoracic segment which is produced backward. He describes the outer ramus of the uropod as curved somewhat outward at the end.

## INCERTÆ SEDIS.

## SPHÆROMA SAVIGNII, Milne-Edwards.

1825. *Sphæroma dumerilii* (preocc.), Audouin, Explic. Planches Égypte, Savigny, pl. 12, fig. 4.  
 1840. *S. savignii*, Milne-Edwards, Hist. Nat. Crust., vol. iii., p. 208.  
 1843. *S. s.*, Krauss, Südafrik. Crust., p. 65.  
 In the Algæ of the coast of Natal.

## SPHÆROMA MACROCEPHALUM, Krauss.

1843. *Sphæroma macrocephala*, Krauss, Südafrik. Crust., p. 65.  
 In the Algæ of the coast of Natal. Length 2 lines.

## TRIBE VALVIFERA.

## FAMILY IDOTEIDÆ.

1852. *Idoteidæ*, Dana, American Journ. Sci., Ser. 2, vol. xiv., p. 300.  
 1900. *I.*, Stebbing, S.A. Crustacea, pt. 1, p. 51; 1902, pt. 2, p. 55.

## GEN. IDOTEA, J. C. Fabricius.

1793. *Idotea*, Fabricius, Suppl. Ent. Syst., p. 302.  
 1900. *I.*, Stebbing, S.A. Crustacea, pt. 1, p. 51.

## \* IDOTEA INDICA, Milne-Edwards.

1840. *Idotea indica*, Milne-Edwards, Hist. Nat. Crust., vol. iii., p. 131.  
 1843 (?). *I. latreillii*, Guérin-Méneville, Iconogr. Règne Anim., Crust. Expl., p. 32.

The Cape of Good Hope. Length 30 mm. Telsonic segment with a deep longitudinal medio-dorsal furrow. This is not mentioned by Milne-Edwards, nor does Guérin mention the superior size of the last peræopods which is emphasised by Milne-Edwards, so that the identification of the two names by Miers remains doubtful.

1902. *I. indica*, Stebbing, S.A. Crustacea, pt. 2, p. 62.  
 No. 107, sent by Dr. Gilchrist, from a depth between 16 and 36 m., in Hout Bay. Length 27 mm.

## GEN. PARIDOTEA, Stebbing.

1900. *Paridotea*, Stebbing, S.A. Crust., pt. 1, p. 52.

## \* PARIDOTEA UNGULATA (Pallas).

1772. *Oniscus unguulatus*, Pallas, Spicil. Zool., fasc. 9, p. 62, pl. 4, fig. 11.
1818. *Idotea unguolata*, Lamarck, Anim. sans vertèbres, vol. v., p. 160.
1840. *I. lalandii*, Milne-Edwards, Hist. Nat. Crust., vol. iii., p. 132, pl. 31, fig. 7, and *I. affinis*, p. 133.
1843. *I. l.*, Krauss, Südafrik. Crust., p. 61.  
Two specimens from Table Bay, sent by Baron von Ludwig, in the Stuttgart Museum. Length 1 inch 9 lines; that is, about 45 m.
1843. *I. affinis*, Krauss, Südafrik. Crust., p. 61.  
Among the Algæ in Table Bay, tolerably common. Length 1 inch 3 lines.
1843. *I. edwardsii*, Guérin-Méneville, Iconogr. du Règne Anim., Texte, p. 33.  
From the Cape of Good Hope. Length 50 to 60 mm.
1866. *I. affinis*, Heller, Novara Crustacea, p. 130.  
From the Cape. Length 40–45 mm.
1900. *Paridotea unguolata*, Stebbing, S.A. Crustacea, pt. 1, p. 53.  
Sent by Dr. Gilchrist, No. 10, from Table Bay, dredged; length 48 and 51 mm. No. 11, from Woodstock beach, Table Bay; length 39 and 40 mm. No. 252, from rock pool in False Bay.
1909. *P. u.*, Chilton, Crust. Subantarct. Is. N. Zealand, p. 660.

## PARIDOTEA PERONII, Milne-Edwards.

1840. *Idotea peronii*, Milne-Edwards, Hist. Nat. Crust., vol. iii., p. 133.
1843. *I. distincta*, Guérin-Méneville, Iconogr. du Règne Anim., Texte, p. 33.  
From the Cape of Good Hope. Length 35 mm.
1881. *I. peronii*, Miers, J. Linn. Soc., London, vol. xvi., p. 55, pl. 2, figs. 6, 7.  
The description and figure given by Miers show that the species is fitly placed under *Paridotea*.

## GEN. SYNIDOTEA, Harger.

1878. *Synidotea*, Harger, Amer. Journ. Sci., Ser. 3, vol. xv., p. 374.
1902. *S.*, Stebbing, S.A. Crustacea, pt. 2, p. 59.

## \* SYNIDOTEA HIRTIPES (Milne-Edwards).

1840. *Idotea hirtipes*, Milne-Edwards, Hist. Nat. Crust., vol. iii., p. 134.

From the coasts of the Cape of Good Hope.

1843. *I. h.*, Krauss, Südafrik. Crust., p. 61.

Krauss does not claim to have seen it.

1881. *Edotia h.*, Miers, J. Linn. Soc. London, vol. xvi., p. 68.

Miers says: "There are in the British Museum several dried specimens from Simon's Bay, South Africa, collected on a sandy bottom in 4-7 fathoms." Again he says: "In the Paris collection I having examined, besides four specimens from the Cape of Good Hope (types of M.-Edwards's description), others from the same locality (MM. Quoy and Gaimard)."

1902. *Synidotea h.*, Stebbing, S.A. Crustacea, pt. 2, p. 60.

Sent by Dr. Gilchrist, No. 90, from 69 m. depth, Cape St. Blaize, N.  $3\frac{3}{4}$  E., distant 8 miles; No. 91, from 49 m. depth, Cape St. Blaize N.  $35^{\circ}$  W., distant  $4\frac{1}{2}$  miles; No. 92, from 60 m. depth, Cape St. Blaize NW., distant  $3\frac{1}{4}$  miles.

## GEN. GLYPTIDOTEA, Stebbing.

1902. *Glyptidotea*, Stebbing, Crustacea, pt. 2, p. 50.

## \* GLYPTIDOTEA LICHTENSTEINII (Krauss).

1843. *Idotea lichtensteinii*, Krauss, Südafrik. Crust., p. 62, pl. 4, fig. 4.

In the Algæ of Table Bay.

1902. *Glyptidotea l.*, Stebbing, S.A. Crust., pt. 2, p. 57, pl. 10.

No. 89, sent by Dr. Gilchrist, from depth between 18 and 29 m., in Algoa Bay, between Bird Island and mainland.

## FAMILY ASTACILLIDÆ.

1897. *Astacillidæ*, Sars, Crustacea of Norway, vol. ii., p. 88.

1908. *A.*, Stebbing, S.A. Crustacea, pt. 4, p. 50, in Ann S.A. Mus., vol. vi., pt. 1.

## GEN. ANTARCTURUS, zur Strassen.

1902. *Antarcturus*, zur Strassen, Zool. Anzeiger, vol. xxv., p. 686.

1908. *A.*, Stebbing, S.A. Crustacea, pt. 4, p. 52.



\* ANTARCTURUS Kladophoros, Stebbing.

1908. *Antarcturus kladophoros*, Stebbing, S.A. Crustacea, pt. 4, p. 53, pl. 32.

No. 95, sent by Dr. Gilchrist, was dredged from a depth of 229 m., Cape St. Blaize, N. by E., distant 73 miles.

## TRIBE ASELLOTA.

### FAMILY MUNNIDÆ.

1882. *Munnidæ*, Sars, Vidensk. Forhandl. Christiania, No. 18, p. 17.

1897. *M.*, Sars, Crustacea of Norway, vol. ii., pt. 6, p. 105.

### GEN. PARAMUNNA, Sars.

1866. *Paramunna*, Sars, Beretning Zool. Reise ved Kysterne Christianias, p. 31.

1897. *P.*, Sars, Crustacea of Norway, vol. ii., pt. 6, p. 111.

\* PARAMUNNA LÆVIFRONS, n. sp.

#### Plate XLVIA.

This species is distinguished from the northern *Paramunna bilobata*, Sars, by having the broad head shallowly convex in front, instead of being produced into two divergent lobes, which Sars includes among the characters of the genus, as well as calling attention to them in the name of the typical species. But the new species agrees with the old in the conically produced eye-lobes, the six-jointed doubly geniculate second antennæ, the very small but distinctly three-jointed palp of the mandibles, the stoutly subchelate first gnathopods, with the remaining limbs very slender, and in the shape of the first two pairs of pleopods which constitute the male operculum.

The lateral margins of the broad depressed peræon converge ovately to the narrower telsonic segment, distally ovate, but with the sides at first scarcely curved. The eyes are small, with five components. In the first antennæ the third joint of the peduncle is scarcely larger than any of the three joints of the flagellum. In the second antennæ the fourth and fifth joints are both short between the large third and sixth; the seven-jointed flagellum is as long as the third and fourth joints of the peduncle combined. The fifth joint of the first gnathopods is distally much broader than long. The finger, which has a secondary tooth on the inner side, overlaps the

apex of the inner margin of the fifth joint. The peræopods closely resemble the second gnathopods. As to the uropods, I cannot feel sure that there is more than one little ramus, though there may be a still smaller outer one.

Length 1 mm. Both specimens examined were clearly males, as shown by the characters of the first and second pleopods.

Locality, lat.  $32^{\circ} 53' 30''$  S., long.  $28^{\circ} 11' 00''$  E., from depth of 75 m. No. 83, obtained by Dr. Gilchrist.

The specific name, smooth-fronted, alludes to the character which distinguishes this species from *P. bilobata*.

### TRIBE EPICARIDEA.

1908. *Epicaridea*, Stebbing, S.A. Crustacea, pt. 4, p. 56.

### FAMILY BOPYRIDÆ.

1908. *Bopyridæ*, Stebbing, S.A. Crustacea, pt. 4, p. 56.

#### GEN. BATHYGYGE, Hansen.

1897. *Bathygyge*, Hansen, Bull. Mus. Comp. Zoöl. Harvard, vol. xxxi., p. 122.

#### \* BATHYGYGE GRANDIS, Hansen.

1897. *Bathygyge grandis*, Hansen, Bull. Mus. Comp. Zoöl. Harvard, vol. xxxi., p. 122, pl. 6, figs. 2-2c.

1908. *B. g.*, Stebbing, S.A. Crustacea, pt. 4, p. 57, pl. 33.

No. 172, sent by Dr. Gilchrist, in *Glyphocrangon sculptus* (S. I. Smith), from depth between 1,463 and 1,646 m., Cape Point NE. by E.  $\frac{1}{4}$  E., distant 40 miles.

### FAMILY CYPRONISCIDÆ.

1889. *Cyproniscidæ*, Giard and Bonnier, Travaux de Wimereux, Bopyriens, p. 221.

1902. *C.*, Stebbing, S.A. Crustacea, pt. 2, p. 74.

#### GEN. CYPRONISCUS, Kossmann.

1884. *Cyproniscus*, Kossman, Sitzungsab. k. Akad. Wiss. Berlin, pt. 22, p. 460.

1902. *C.*, Stebbing, S.A. Crustacea, pt. 2, p. 75.

## \* CYPRONISCUS CROSSOPHORI, Stebbing.

1901. *Cyproniscus crossophori*, Stebbing, Knowledge, vol. xxiv., p. 100.

1902. *C. c.*, Stebbing, S.A. Crustacea, pt. 2, p. 76, pl. 15B.

No. 57, sent by Dr. Gilchrist, in *Crossophorus africanus*, Stebbing, from depth of 229 m., Cape St. Blaize, N. by E., distant 73 miles.

## TRIBE ONISCIDEA.

## FAMILY LIGIIDÆ.

## GEN. LIGIA, J. C. Fabricius.

798. *Ligia*, Fabricius, Suppl. Ent. Syst., p. 301.

## LIGIA GLABRATA, Brandt.

1833. *Ligia glabrata*, Brandt, Conspectus Oniscodorum, Bull. Soc. Nat. Moscou, vol. vi., p. 172 (10).

From the Cape of Good Hope.

1843. *Lygia g.*, Krauss, Südafrik. Crust., p. 62.

Very frequent on the coast of Table Bay, where it lodges under stones and the animals and plants lying on the beach. Length 11 lines, breadth 5·5 lines.

1885. *Ligia g.*, Budde-Lund, Isopoda terrestria, p. 263.

Budde-Lund says: "I have seen a dried and mutilated specimen from the Cape of Good Hope (Berlin Museum)." This specimen was scarcely half the length, and less than half the breadth given by Krauss.

## LIGIA DILATATA, Brandt.

1833. *Ligia dilatata*, Brandt, Conspectus Oniscodorum, p. 172 (10).

1843. *Lygia d.*, Kruass, Südafrik. Crust., p. 62.

Krauss only refers to Brandt.

1847. *L. d.*, White, List Crustacea in Brit. Mus., p. 98.

"Cape of Good Hope. From the collection of Dr. Krauss."

1885. *Ligia d.*, Budde-Lund, Isopoda terrestria, p. 262.

"Locality, Cape of Good Hope. A dried specimen is preserved in the Berlin Museum, and a few specimens collected by Messrs. Krauss and Drege are in the Museum of St. Petersburg."

## LIGIA GRACILIPES, Budde-Lund.

1885. *Ligia gracilipes*, Budde-Lund, Isopoda terrestria, p. 270.

"Locality, South Africa; a few specimens from 'Laudana' are in the Simon Museum."

## GEN. TITANA, Budde-Lund.

1909. *Titana*, Budde-Lund, Schultze's Reise in Südafrika, Land-Isopoden, p. 65.

## TITANA MIRABILIS, Budde-Lund.

1909. *Titana mirabilis*, Budde-Lund, Schultze's Reise in Südafrika, p. 65, pl. 7, figs. 1-10.

Found by Schultze in nests of *Hodotermes viator* (Latreille), at Steinkopf, in Little Namaqualand, Cape Colony.

## GEN. PHYLLONISCUS, Purcell.

1903. *Phylloniscus*, Purcell, Trans. S.A. Phil. Soc., vol. xiv., pt. 4, p. 409.

It is rather doubtful whether this genus can stand in the family Ligiidæ. Budde-Lund suggests that it may be placed there, influenced probably in part by the general resemblance between the typical species and his own *Schöblia circularis*, but also in part by the circumstance that of three African species of Isopoda found in the nests of Termites the *Titana* and the *Schöblia* certainly belong to the Ligiidæ, whereas the numerous land isopods found in the nests of ants all belong to the family Oniscidæ.

## \* PHYLLONISCUS BRAUNSI, Purcell.

1903. *Phylloniscus braunsi*, Purcell, Trans. S.A. Phil. Soc., vol. xiv., pt. 4, p. 410, figs. 1-3 in text.

Taken by Dr. H. Brauns, from the subterranean galleries of *Hodotermes viator* at Willowmore, Cape Colony, and by Dr. Purcell "at Matjesfontein, Cape Colony, under a stone in the galleries of a dark-coloured *Hodotermes* (evidently *H. mossambicus*)."  
A specimen kindly sent me by Dr. Péringuey has not yet been sacrificed to scientific investigation.



## FAMILY TYLIDÆ.

1893. *Tylidæ*, Stebbing, History of Crustacea, p. 423.  
 1901. *T.*, Chilton, Trans. Linn. Soc. London, vol. viii., pt. 4, p. 120.  
 1909. *T.*, Budde-Lund, Schultze's Reise in Südafrika, p. 70.

## GEN. TYLOS, Audouin.

1825. *Tylos*, Audouin, Explic. planches Crust. Égypte, p. 287.  
 1893. *T.*, Dollfus, Bull. Soc. Zool. France, vol. xviii., p. 189.  
 1909. *T.*, Budde-Lund, Schultze's Reise in Südafrika, p. 70.  
 1910. *T.*, Stebbing, J. Linn. Soc. London, vol. xxxi., p. 227.

I may here remark that there is great similarity, though not perhaps specific identity, between my *Tylos exiguus* and the earlier *Tylos minor*, Dollfus, from Mahé, the description of which I had overlooked.

## TYLOS GRANULATUS, Krauss.

1843. *Tylos granulatus*, Krauss, Südafrik. Crust., p. 64, pl. 4, fig. 5 a-e.

In Table Bay. Length 1 inch 7 lines; breadth 9·5 lines.

1885. *T. g.*, Budde-Lund, Isopoda terrestria, p. 276.

Budde-Lund says: "I have seen specimens from the Cape, preserved in the Museum of St. Petersburg."

1909. *T. g.*, Budde-Lund, Schultze's Reise in Südafrika, p. 70.

Found by Dr. Schultze in several localities on the south-west coast of Africa.

## \* TYLOS CAPENSIS, Krauss.

1843. *Tylos capensis*, Krauss, Südafrik. Crust., p. 64, pl. 4, fig. 6 a-b.

In Table Bay. Length 1 inch; breadth 5·5 lines.

No. 40, sent by Dr. Gilchrist, was taken out of sand between Somerset West and Gordon's Bay. This species has also been sent me by C. F. Kies, Esq., from Gordon's Bay, False Bay. The specimens are remarkably smooth.

## FAMILY ONISCIDÆ.

*Phylloniscus*, Purcell, as the name implies, perhaps belongs rather to this family than to the Ligiidæ.

## GEN. PORCELLIO, Latreille.

1804. *Porcellio*, Latreille, Hist. Nat. Crust. et Ins., vol. vii., p. 45.  
 1885. *P.*, Budde-Lund, Isopoda terrestria, p. 82.  
 1908. *P.*, Budde-Lund, Voeltzkow's Reise in Ostafrika, vol. ii., p. 280.

## PORCELLIO SCABER, Latreille.

1804. *Porcellio scaber*, Latreille, Hist. Nat. Crust. et Ins., vol. vii., p. 45.  
 1885. *P. s.*, Budde-Lund, Isopoda terrestria, p. 129.  
     From Cape of Good Hope (Berlin Museum).  
 1909. *P. s.*, Budde-Lund, Schultze's Reise in Südafrika, p. 58.

The author says: "This widely distributed species several times found in the neighbourhood of Capetown was also brought home by the traveller from the 'Cape flats.'" The treatise is given as an extract from the Denkschriften der med.-nat. Gesellschaft, vol. xiv.

## GEN. METOPONORTHUS, Budde-Lund.

1879. *Metoponorthus*, Budde-Lund, Prospectus Isopodum terrestrium, p. 4.

## METOPONORTHUS PRUINOSUS (Brandt).

1833. *Porcellio pruinosis*, Brandt, Conspectus Oniscodorum, pp. 181 (19), 188 (26).  
 1879. *Metoponorthus p.*, Budde-Lund, Prospectus Isop. terr., p. 4.  
 1909. *M. p.*, Budde-Lund, Schultze's Reise in Südafrika, p. 58.

"A specimen of this species was collected at Steinkopf in Little Namaqualand, and two specimens were taken in the 'Cape flats.' This cosmopolitan species had also been found earlier at Capetown."

## GEN. NIAMBIA, Budde-Lund.

1904. *Niambia*, Budde-Lund, Revision of Isop. terr., p. 37.  
 1908. *N.*, Budde-Lund, Voeltzkow's Reise in Ostafrika, p. 280.  
 1909. *Niambia*, Budde-Lund, Schultze's Reise in Südafrika, p. 59.

This genus was named without definition in 1904, to include the species "(*Leptotrichus squamatus* B.-L., *L. truncatus* B.-L., *Metoponorthus capensis* Dollf.)"

## NIAMBIA TRUNCATA (Brandt).

1833. *Porcellio truncatus*, Brandt, Conspectus Oniscodorum, pp. 19, 28.

1843. *P. t.*, Krauss, Südafrik. Crust., p. 63.

From the Cape of Good Hope.

1879. *Leptotrichus t.*, Budde-Lund, Prospektus Isop. terr., p. 5.

1909. *Niambia truncata*, Budde-Lund, Schultze's Reise in Südafrika, pp. 53, 60, pl. 6, figs. 4-14.

From Capetown and Simonstown (Berlin and Stockholm Museums); from Port Elizabeth (Dr. Brauns in the Hamburg Museum); also Dr. Schultze has collected this species abundantly in several localities of South Africa, Steinkopf, Rooibank (behind Walvisch Bay), and the Cape flats.

## NIAMBIA SQUAMATA (Budde-Lund).

1885. *Leptotrichus squamatus*, Budde-Lund, Isopoda terrestria, p. 196.

1909. *Niambia squamata*, Budde-Lund, Schultze's Reise in Südafrika, p. 60, pl. 6, figs. 1-3.

"South Africa (Landana, Chinchoxo)."

## NIAMBIA CAPENSIS (Dollfus).

1895. *Metoponorthus capensis*, Dollfus, Mém. Soc. Zool. France, vol. viii., p. 350.

1904. *Niambia c.*, Budde-Lund, Revision of Isop. terr., p. 37.

1908. *N. c.*, Budde-Lund, Voeltzkow's Reise in Ostafrika, p. 280.

1909. *N. c.*, Budde-Lund, Schultze's Reise in Südafrika, p. 63, pl. 6, figs. 39, 40.

Found at Capetown and in Simonstown.

## NIAMBIA BRUNNEA, Budde-Lund.

1909. *Niambia brunnea*, Budde-Lund, Schultze's Reise in Südafrika, p. 61, pl. 6, figs. 15-25.

South-west Africa; many specimens taken in July and August, 1904, at Kamaggas and Steinkopf in Little Namaqualand.

## NIAMBIA PALLIDA, Budde-Lund.

1909. *Niambia pallida*, Budde-Lund, Schultze's Reise in Südafrika, p. 61, pl. 6, figs. 26-28.

At Steinkopf in Little Namaqualand and Kubub in Great Namaqualand.

## NIAMBIA HIRSUTA, Budde-Lund.

1909. *Niambia hirsuta*, Budde-Lund, Schultze's Reise in Südafrika, p. 62, pl. 6, figs. 29-31.  
At Port Elizabeth (Dr. Brauns in the Hamburg Museum).

## NIAMBIA MODESTA, Budde-Lund.

1909. *Niambia modesta*, Budde-Lund, Schultze's Reise in Südafrika, p. 62, pl. 6, figs. 32-34.  
German South-West Africa, at Grootfontein, collected by von Erffa.

## NIAMBIA ANGUSTA, Budde-Lund.

1909. *Niambia angusta*, Budde-Lund, Schultze's Reise in Südafrika, p. 63, pl. 6, figs. 35-37.  
At Steinkopf.

## NIAMBIA PUSILLA, Budde-Lund.

1909. *Niambia pusilla*, Budde-Lund, Schultze's Reise in Südafrika, p. 63, pl. 6, fig. 38.  
At Simonstown.

## NIAMBIA MARGINEPAPILLOSA, Budde-Lund.

1909. *Niambia marginepapillosa*, Budde-Lund, Schultze's Reise in Südafrika, p. 64, pl. 6, fig. 41.  
At Simonstown.

## GEN. GERUFA, Budde-Lund.

1909. *Gerufa*, Budde-Lund, Schultze's Reise in Südafrika, p. 58.

## GERUFA HIRTICORNIS, Budde-Lund.

1909. *Gerufa hirticornis*, Budde-Lund, Schultze's Reise in Südafrika, p. 59, pl. 6, figs. 42-56.  
On the Cape flats.

## GEN. NAHIA, Budde-Lund.

1909. *Nahia*, Budde-Lund, Schultze's Reise in Südafrika, p. 64.

## NAHIA HIRSUTA (Budde-Lund).

1906. *Philoscia hirsuta*, Budde-Lund, Deutsch. Südpol. Exp., vol. ix., Zool., pt. 1, p. 89, pl. 3, figs. 42-52.  
Several specimens in the neighbourhood of Capetown.



1908. *Nahia h.*, Budde-Lund, Voeltzkow's Reise in Ostafrika, vol. ii., p. 290.

1909. *N. h.*, Budde-Lund, Schultze's Reise in Südafrika, p. 64.

Many specimens obtained by Dr. L. Schultze on the Cape flats.

GEN. PHILOSCIA, Latreille.

1804. *Philoscia*, Latreille, Hist. Nat. Crust. et Ins., vol. vii., p. 43.

1885. *P.*, Budde-Lund, Isopoda terrestria, p. 207.

PHILOSCIA MINA, Budde-Lund.

1885. *Philoscia mina*, Budde-Lund, Isopoda terrestria, p. 219.

Specimens from the Cape of Good Hope collected by Drege are in the Museum of St. Petersburg.

GEN. APHILOSCIA, Budde-Lund.

1908. *Aphiloscia*, Budde-Lund, Voeltzkow's Reise in Ostafrika, vol. ii., p. 291.

APHILOSCIA VILIS (Budde-Lund).

1885. *Philoscia vilis*, Budde-Lund, Isopoda terrestria, p. 210.

From the Cape of Good Hope, a damaged specimen, collected by Drege, is in the Museum of St. Petersburg.

1908. *Aphiloscia v.*, Budde-Lund, Voeltzkow's Reise in Ostafrika, vol. ii., p. 292.

FAMILY EUBELIDÆ.

1899. *Eubelidæ*, Budde-Lund, Revision of Isop. terr., Vid. Meddel., Ser. 2, vol. i.

Budde-Lund expresses the opinion that this family "will have the same systematic value as all the *Armadillidæ* and *Porcellionidæ* taken together."

1907. *E.*, H. Richardson, Smithson. Misc. Coll., vol. l., pt. 2, p. 220.

GEN. EUBELUM, Budde-Lund.

1885. *Eubelum*, Budde-Lund, Isopoda terrestria, p. 291.

1899. *E.*, Budde-Lund, Revision of Isop. terr., p. 1.

1908. *E.*, Budde-Lund, Voeltzkow's Reise in Ostafrika, vol. ii., p. 271.

## EUBELUM LUBRICUM, Budde-Lund.

1885. *Eubelum lubricum*, Budde-Lund, Isopoda terrestria, p. 292.

South Africa, Laudana [Landana] and Chinchexo.

1899. *E. l.*, Budde-Lund, Revision of Isop. terr., pp. 4, 6, pl. 2.  
figs. 1-8.

## FAMILY DETONIDÆ.

1906. *Detoninæ*, Budde-Lund, Deutsch. Südpol. Exp., vol. ix., Zool.,  
pt. 1, p. 84.

## GEN. DETO, Guérin.

1836. *Deto*, Guérin, Magasin de Zoologie, Année vi., notice 21, p. 1.

1885. *D.*, Budde-Lund, Isopoda terrestria, p. 233.

1909. *D.*, Chilton, Crust. Subantarct. Is. N. Zealand, p. 666.

## DETO ECHINATA, Guérin.

1836. *Deto echinata*, Guérin, Magasin de Zoologie, Année vi.,  
notice 21, p. 2, pl. 14.

1843. *D. e.*, Krauss, Südafrik. Crust., p. 63.

Krauss says: "I have found this species with *Lygia glabrata*  
BRANDT on the coast of Table Bay. Colour greyish green."  
In the reference to Guérin he, like Milne-Edwards, gives  
pl. 24, figs. 1-4.

## FAMILY ARMADILLIDIIDÆ or CUBARIDÆ.

In the Isopoda terrestria of the Swedish Expedition to Kilimandjaro, pt. 21, p. 11, Budde-Lund transfers the genus *Armadillidium*, Brandt, from his group Armadilloidea to his group Oniscoidea, and includes the genera which he names *Armadillo*, *Cubaris*, and *Diploexochus* in his sub-family Oniscinæ, one of the several groups into which he subdivides the family Oniscidæ. I have fully discussed the invalidity of the generic name *Armadillo* among Isopoda terrestria in Willey's Zoological Results, Part V., p. 650, 1900. Brandt n. 1833 formed a section Armadillidia for his genus *Armadillidium*, and another Cubaridea containing his genera *Cubaris* and *Diploexochus*. According to Budde-Lund's latest view it appears that all South African species hitherto referred to *Armadillo* or *Cubaris* should now be placed under *Diploexochus*.

## GEN. DIPLOEXOCHUS, Brandt.

1833. *Diploexochus*, Brandt, Conspectus Oniscodorum, p. 192 (30).  
 1900. *Cubaris* (part), Stebbing, Willey's Zool. Results, pt. 5, p. 649.  
 1909. *Diploexochus*, Budde-Lund, Schultze's Reise in Südafrika, p. 54.  
 1910. *D.*, Budde-Lund, Sjöstedts Kilimandjaro-Meru Exp., pt. 21, Isopoda, pp. 8-12.

Budde-Lund states that in the sub-genera *Armadillo* and *Cubaris* the inner lacinia of the mandibles is furnished with several free penicilli, whereas in the sub-genus *Diploexochus* it has only a single free penicillus.

## DIPLOEXOCHUS NIGRICANS (Brandt).

1833. *Cubaris nigricans*, Brandt, Conspectus Oniscodorum, p. 191 (29).  
 1840. *Armadillo n.*, Milne-Edwards, Hist. Nat. Crust., vol. iii., p. 179.  
 Inhabits the Cape of Good Hope.  
 1843. *A. n.*, Krauss, Südafrik. Crust., p. 63.  
 1885. *A. n.*, Budde-Lund, Isopoda terrestria, p. 22.

The author says: "I have examined specimens from the Cape of Good Hope in the Museums of St. Petersburg and Berlin."

1909. *Diploexochus n.*, Budde-Lund, Schultze's Reise in Südafrika, p. 54.

## DIPLOEXOCHUS FLAVESCENS (Brandt).

1833. *Cubaris flavescens*, Brandt, Conspectus Oniscodorum, p. 191 (29).  
 1840. *Armadillo f.*, Milne-Edwards, Hist. Nat. Crust., vol. iii., p. 179.  
 Inhabits the Cape of Good Hope.  
 1843. *A. f.*, Krauss, Südafrik. Crust., p. 63.  
 Krauss refers this and the preceding species to the Cape of Good Hope, merely remarking that Milne-Edwards has made *Cubaris* a synonym of *Armadillo*.  
 1885. *A. f.*, Budde-Lund, Isopoda terrestria, p. 20.

"Cape of Good Hope (Berlin Museum). Two young specimens, probably collected by Drege at the Cape are in the Museum of St. Petersburg."

1909. *Diploexochus f.*, Budde-Lund, Schultze's Reise in Südafrika, p. 54.

## DIPLOEXOCHUS ORBICULARIS (Budde-Lund).

1885. *Armadillo orbicularis*, Budde-Lund, Isopoda terrestria, p. 23.

"A very much mutilated and defective specimen, probably from the Cape, is in the Museum of St. Petersburg."

## DIPLOEXOCHUS MUCIDUS (Budde-Lund).

1885. *Armadillo mucidus*, Budde-Lund, Isopoda terrestria, p. 32.

Cape of Good Hope. Only two specimens, collected by Drege, in the Museum of St. Petersburg.

## DIPLOEXOCHUS NIGRINUS (Budde-Lund).

1885. *Armadillo nigrinus*, Budde-Lund, Isopoda terrestria, p. 37.

Cape of Good Hope? Several badly preserved specimens, probably collected by Drege at the Cape, are in the Museum of St. Petersburg.

## DIPLOEXOCHUS PUBESCENS (Budde-Lund).

1885. *Armadillo pubescens*, Budde-Lund, Isopoda terrestria, p. 287.

Cape of Good Hope. A specimen, collected by Drege, in the Museum of St. Petersburg.

## DIPLOEXOCHUS ACULEATUS (Budde-Lund).

1885. *Armadillo aculeatus*, Budde-Lund, Isopoda terrestria, p. 289.

South Africa. Specimens from "Chinchoxo" are in the Museums of St. Petersburg and of E. Simon.

A specimen of this remarkable species was kindly sent me many years ago by M. Adrien Dollfus, as taken at Landana, and derived from the cabinet of M. E. Simon.

## DIPLOEXOCHUS QUADRIMACULATUS, Budde-Lund.

1909. *Diploexochus quadrimaculatus*, Budde-Lund, Schultze's Reise in Südafrika, p. 54, pl. 5, figs. 1-7.

South-West Africa, at Keetmanshoop in Great Namaqualand.

## DIPLOEXOCHUS LONGIPES, Budde-Lund.

1909. *Diploexochus longipes*, Budde-Lund, Schultze's Reise in Südafrika, p. 55, pl. 5, figs. 8-11.

South-West Africa, at Okahandja in South Herero-Land



DIPLOEXOCHUS RUFESCENS, Budde-Lund.

1909. *Diploexochus rufescens*, Budde-Lund, Schultze's Reise in Südafrika, p. 56, pl. 5, figs. 12-18.

South-West Africa, numerous specimens at Kamaggas in Little Namaqualand.

DIPLOEXOCHUS ALBESCENS, Buddè-Lund.

1909. *Diploexochus albescens*, Budde-Lund, Schultze's Reise in Südafrika, p. 56, pl. 5, figs. 29-38.

South-West Africa, at Port Nolloth in Little Namaqualand.

DIPLOEXOCHUS PUSILLUS, Budde-Lund.

1909. *Diploexochus pusillus*, Budde-Lund, Schultze's Reise in Südafrika, p. 57, pl. 5, figs. 39-43.

South Africa, one specimen on the "Cape flats" at Cape Town.

DIPLOEXOCHUS FORMICARUM, Budde-Lund.

1909. *Diploexochus formicarum*, Budde-Lund, Schultze's Reise in Südafrika, p. 57, pl. 8, figs. 44-56.

South Africa. Dr. L. Schultze obtained a single specimen from the nurseries of the ant *Myrmicaria baumi* FOR. at Kooa in the Kalahari.

## AMPHIPODA.

1816. *Amphipoda*, Latreille, Nouveau Dictionnaire d'Histoire Naturelle, ed. 2, vol. i., p. 467.

1906. A., Stebbing, Das Tierreich, vol. xxi., p. 1.

## TRIBE GAMMARIDEA.

1852. *Gammaridea*, Dana, American Journal of Science, Ser. 2, vol. xiv., p. 308.

1890. G., Sars, Crustacea of Norway, vol. i., p. 21.

1906. G., Stebbing, Das Tierreich, vol. xxi., p. 5.

1909. G., Chilton, Crustacea of Subantarctic Islands of New Zealand, p. 615.

## FAMILY LYSIANASSIDÆ.

1874. *Lysianassidæ*, Buchholz, Zweite Deutsche Nordpolarfahrt, vol. ii., p. 299.

1890. *L.*, Sars, Crustacea of Norway, vol. i., p. 28.  
 1906. *L.*, Stebbing, Das Tierreich, vol. xxi., p. 8.  
 1910. *L.*, Stebbing, Thetis Exp. N.S. Wales, Mem. iv., pt. 5, pp. 568, 633.

GEN. TRISCHIZOSTOMA, Boeck.

1861. *Trischizostoma*, Boeck, Forhandlinger ved de Skandinaviske Naturforskeres Møde 8, p. 637.  
 1906. *T.*, Stebbing, Das Tierreich, vol. xxi., pp. 12, 717.  
 1908. *T.*, Stebbing, S.A. Crustacea, pt. 4, p. 59.  
 1908. *T.*, E. W. Sexton, Proc. Zool. Soc. London, 1908, p. 370.

\* TRISCHIZOSTOMA REMIPES, Stebbing.

1908. *Trischizostoma remipes*, Stebbing, S.A. Crustacea, pt. 4, p. 61, pl. 34.  
 Specimens sent by Dr. Gilchrist; No. 120, taken off Buffalo Bay, SW. by W.  $\frac{3}{4}$  W.  $3\frac{1}{2}$  miles, at 58 m. depth; No. 84, in lat.  $33^{\circ} 9' 30''$  S., long.  $28^{\circ} 3' 00''$  E., at 86 m.

GEN. AMARYLLIS, Haswell.

1880. *Amaryllis*, Haswell, P. Linn. Soc. New South Wales, vol. iv., p. 253.  
 1906. *A.*, Stebbing, Das Tierreich, vol. xxi., p. 23.  
 1910. *A.*, Stebbing, Thetis Exp. N.S. Wales, Mem. iv., pt. 5, pp. 569, 633.

\* AMARYLLIS MACROPHthalmus, Haswell.

1880. *Amaryllis macrophthalmus*, Haswell, P. Linn. Soc. N.S. Wales, vol. iv., p. 253, pl. 8, fig. 3.  
 1908. *A. m.*, Stebbing, S.A. Crustacea, pt. 4, p. 67.  
 No. 89, sent by Dr. Gilchrist; dredged between Bird Island and the mainland in 18–29 m. (10–16 fathoms, not 4–16 as misprinted).

GEN. CYPHOCARIS, Boeck.

1871. *Cyphocaris*, Boeck, Forhandlinger i Videnskabs-Selskabet i Christiania, 1870, p. 103.  
 1906. *C.*, Stebbing, Das Tierreich, vol. xxi., pp. 28, 717.

## CYPHOCARIS RICHARDI, Chevreux.

1905. *Cyphocaris richardi*, Chevreux, Bulletin du Musée océanographique de Monaco, No. 24, p. 1, figs. 1, 2 a-g.  
1906. *C. r.*, Stebbing, Das Tierreich, vol. xxi., p. 717.  
1909. *C. r.*, Strauss, Wissenschaftliche Ergebnisse der Deutschen Tiefsee Expedition, vol. xx., pt. 1, p. 65, text figs. 39, 40, pl. 6, fig. 37.

Discussion of the eyes. Several specimens of this large pelagic Lysianassid, which reaches a length of 40 mm., were obtained by the German deep-sea expedition in the neighbourhood of the south point of Africa and at New Amsterdam, between 2,000 and 2,500 m. depth.

## GEN. LYSIANASSA, Milne-Edwards.

1830. *Lysianassa* (part), Milne-Edwards, Ann. Sci. Nat., vol. xx. p. 364.  
1906. *L.*, Stebbing, Das Tierreich, vol. xxi., pp. 37, 718.

## \* LYSIANASSA VARIEGATA (Stimpson).

1855. *Anonyx variegatus*, Stimpson, Pr. Ac. Sci. Philad., vol. vii., p. 394.

Simon's Bay, Cape of Good Hope.

1888. *Lysianax v.*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 682, pl. 23.

Simon's Bay, at 33 m. depth.

1906. *Lysianassa variegata*, Stebbing, Das Tierreich, vol. xxi., p. 39.  
1910. *L. v.*, Stebbing, S.A. Crustacea, pt. 5.

No. 89, sent by Dr. Gilchrist, from depth between 18 and 29 m., between Bird Island and mainland.

## GEN. HIPPOMEDON, Boeck.

1871. *Hippomedon*, Boeck, Forh. Selsk. Christian., 1870, p. 102.  
1906. *H.*, Stebbing, Das Tierreich, vol. xxi., pp. 58, 719.

## \* HIPPOMEDON LONGIMANUS (Stebbing).

1888. *Platamon longimanus*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 643, pl. 13.  
1906. *Hippomedon l.*, Stebbing, Das Tierreich, vol. xxi., p. 60.  
1908. *H. l.*, Stebbing, S.A. Crustacea, pt. 4, p. 64.

No. 111, sent by Dr. Gilchrist; taken off Table Mountain E. 41 miles, from 448 m. depth.

## GEN. TRYPHOSA, Boeck.

1871. *Tryphosa*, Boeck, Forh. Selsk. Christian., 1870, p. 117.  
 1906. *T.*, Stebbing, Das Tierreich, vol. xxi., pp. 68, 720.  
 1908. *T.*, Holmes, Pr. U.S. Mus., vol. xxxv., p. 496.  
 1910. *T.*, Stebbing, Thetis Exp. N.S. Wales, Mem. iv., pt. 5,  
 pp. 573, 634.

## \* TRYPHOSA ONCONOTUS, Stebbing.

1908. *Tryphosa onconotus*, Stebbing, S.A. Crustacea, pt. 4, p. 65,  
 pl. 35.  
 No. 111, sent by Dr. Gilchrist; Table Mountain E.  
 41 miles; depth 448 m.

## FAMILY AMPELISCIDÆ.

1882. *Ampeliscidæ*, Sars, Forh. Selsk. Christian., No. 18, p. 29.  
 1906. *A.*, Stebbing, Das Tierreich, vol. xxi., pp. 97, 721.  
 1908. *A.*, Pearse, Pr. U.S. Mus., vol. xxxiv., p. 27.  
 1908. *A.*, Holmes, Pr. U.S. Mus., vol. xxxv., p. 507.  
 1909. *A.*, Strauss, Deutsche Tiefsee Exp., vol. xx., pt. 1, p. 22.  
 1910. *A.*, Stebbing, Thetis Exp. N.S. Wales, Mem. iv., pt. 5,  
 pp. 575, 634.

## GEN. AMPELISCA, Kröyer.

1842. *Ampelisca*, Kröyer, Naturhist. Tidsskrift, vol. iv., p. 154.  
 1906. *A.*, Stebbing, Das Tierreich, vol. xxi., pp. 98, 721.

## \* AMPELISCA BREVICORNIS (Costa).

1853. *Araneops brevicornis*, Costa, Rendiconto della Società Reale  
 Borbonica, n. ser., vol. ii., p. 171.  
 1906. *Ampelisca b.*, Stebbing, Das Tierreich, vol. xxi., p. 100.  
 1908. *A. b.*, Stebbing, S.A. Crustacea, pt. 4, p. 70.  
 Specimens sent by Dr. Gilchrist; No. 111, taken off Table  
 Mountain E. 41 miles, depth 448 m.; No. 121 in False Bay,  
 Roman Rock NW.  $\frac{3}{4}$  W.  $\frac{3}{4}$  mile, depth 33 m.

## \* AMPELISCA ANOMALA, Sars.

1882. *Ampelisca anomala*, Sars, Forh. Selsk. Christian., No. 18, p. 108,  
 pl. 6, fig. 2.  
 1891. *A. a.*, Sars, Crustacea of Norway, vol. i., p. 178, pl. 62, fig. 2.



1910. *A. a.*, Stebbing, S.A. Crustacea, pt. 5.

No. 111, specimens sent by Dr. Gilchrist; off Table Mountain E. 41 miles; depth 448 m. These agree with the description and figures given by Sars in the large corneal lenses, the long first antennæ, the second and third joints of the fifth peræopods, the shape and scanty furniture of the telson. In the mandibles the second joint of the palp has the expansion, which is given by Sars as a character of the genus. The want of this dilatation is emphasised by A. O. Walker as something very unusual in his *Ampelisca cyclops*, 1904. But it is found in the Challenger species *A. chiltoni* and *A. fusca*, and two other of the five Challenger species, namely, *A. acinaces* and *A. abyssicola*, show intermediate gradations.

\* *AMPELISCA CHILTONI*, Stebbing.

1888. *Ampelisca chiltoni*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1042, pl. 103.

1908. *A. c.*, Stebbing, S.A. Crustacea, pt. 4, p. 69.

Specimens sent by Dr. Gilchrist; No. 125, from False Bay, Paulsberg, WNW. 1 mile, depth 44 m.; No. 126, from False Bay, Cape Point Lighthouse W.  $6\frac{1}{2}$  miles, depth 64 m.; and No. 85 from lat.  $33^{\circ} 9' 30''$  S., long.  $28^{\circ} 3' 00''$  E., depth 86 m.

\* *AMPELISCA FUSCA*, Stebbing.

1888. *Ampelisca fusca*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., pp. 1052, 1651, pl. 105.

Cape Agulhas, from 282 m. depth.

1908. *A. f.*, Stebbing, S.A. Crustacea, pt. 4, p. 70.

No. 74, sent by Dr. Gilchrist; dredged off Vasco de Gama Point S. 75 E.  $13\frac{1}{2}$  miles, at 303 m. depth.

GEN. *BYBLIS*, Boeck.

1871. *Byblis*, Boeck, Forh. Selsk. Christian., 1870, p. 228.

1906. *B.*, Stebbing, Das Tierreich, vol. xxi., p. 111.

1908. *B.*, Stebbing, S.A. Crustacea, pt. 4, p. 71.

\* *BYBLIS ANISUROPUS*, Stebbing.

1908. *Byblis anisuropus*, Stebbing, S.A. Crustacea, pt. 4, p. 72, pl. 36.

No. 84, sent by Dr. Gilchrist; from lat.  $33^{\circ} 9' 30''$  S., long.  $28^{\circ} 3' 00''$  E., depth 86 m.

## FAMILY PHOXOCEPHALIDÆ.

1891. *Phoxocephalidæ*, Sars, Crustacea of Norway, vol. i., p. 142.  
 1906. *P.*, Stebbing, Das Tierreich, vol. xxi., p. 133.  
 1910. *P.*, Stebbing, Thetis Exp. N.S. Wales, Mem. 4, pt. 5, pp. 576, 635.

## GEN. HARPINIA, Boeck.

1876. *Harpinia*, Boeck, De Skandinaviske og Arktiske Amphipoder, vol. ii., p. 218.  
 1906. *H.*, Stebbing, Das Tierreich, vol. xxi., pp. 140, 723.  
 1908. *H.*, Holmes, Pr. U.S. Mus., vol. xxxv., p. 521.  
 1909. *H.*, Chilton, Crust. Subantarct. Is. N. Zealand, p. 619.

## \* HARPINIA EXCAVATA, Chevreux.

1887. *Harpinia excavata*, Chevreux, Bull. Soc. Zool. France, vol. xii., p. 568.  
 1908. *H. e.*, Stebbing, S.A. Crustacea, pt. 4, p. 73.  
 No. 111, sent by Dr. Giesbrecht; taken off Table Mountain E. 41 miles, depth 448 m.

## GEN. PONTHARPINIA.

1897. *Pontharpinia*, Stebbing, Tr. Linn. Soc. London, Ser. 2, vol. vii., p. 32.  
 1906. *P.*, Stebbing, Das Tierreich, vol. xxi., pp. 145, 723.

## \* PONTHARPINIA STIMPSONI, Stebbing.

1908. *Pontharpinia stimpsoni*, Stebbing, S.A. Crustacea, pt. 4, p. 75, pl. 37.  
 Specimens sent by Dr. Gilchrist; No. 85 dredged in lat. 33° 9' 30" S., long. 28° 3' 00" E., at 86 m.; No. 89 between Bird Island and mainland, at 18-29 m.

## FAMILY LEUCOTHOIDÆ.

1882. *Leucothoidæ*, Sars, Forh. Selsk. Christian., No. 18, p. 27.  
 1906. *L.*, Stebbing, Das Tierreich, vol. xxi., p. 161.  
 1910. *L.*, Stebbing, Thetis Exp. N.S. Wales, Mem. iv., pt. 5, pp. 580, 636.

## GEN. LEUCOTHOE, Leach.

1813. *Leucothoe*, Leach, Edinb. Encyl., vol. vii., pp. 403, 432.  
1906. *L.*, Stebbing, Das Tierreich, vol. xxi., pp. 163, 724.  
1908. *L.*, Chevreux, Bull. Inst. océanogr. Monaco, No. 117, p. 11.

## LEUCOTHOE AFFINIS, Stimpson.

1855. *Leucothoe affinis*, Stimpson, Pr. Ac. Sci. Philad., vol. vii., p. 394.  
False Bay, Cape of Good Hope.  
1906. *L. a.*, Stebbing, Das Tierreich, vol. xxi., p. 168.

## LEUCOTHOE MIERSI, Stebbing.

1888. *Leucothoe miersi*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 772, pl. 46.  
Off Cape Agulhas, lat. 35° 4' S., long. 18° 37' E., depth 274 m.  
1906. *L. m.*, Stebbing, Das Tierreich, vol. xxi., p. 165.

## FAMILY STENOTHOIDÆ.

1888. *Stenothoidæ*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 747.  
1906. *S.*, Stebbing, Das Tierreich, vol. xxi., pp. 192, 725.  
1907. *S.*, A. O. Walker, Nat. Antarctic Exp., vol. iii., Amphipoda, p. 18.

## GEN. STENOTHOE, Dana.

1852. *Stenothoe*, Dana, American Journ. Sci., Ser. 2, vol. xiv., p. 311.  
1906. *S.*, Stebbing, Das Tierreich, vol. xxi., pp. 192, 725.  
1908. *S.*, Chevreux, Bull. Inst., océanogr. Monaco, No. 113, p. 1 ;  
No. 129, p. 1, and Mém. Soc. Zool. France, vol. xx., p. 471.

## STENOTHOE ADHÆRENS, Stebbing.

1888. *Stenothoe adhærens*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 748, pl. 39.  
Off Cape Agulhas ; specimen on screw of H.M.S. *Challenger*.

## FAMILY LILJEBORGIIDÆ.

1899. *Liljeborgiida*, Stebbing, Ann. Nat. Hist., Ser. 7, vol. iv., p. 211.

1906. *L.*, Stebbing, Das Tierreich, vol. xxi., pp. 229, 726.  
 1910. *L.*, Stebbing, Thetis Exp. N.S. Wales, Mem. iv., pt. 5, pp. 587, 638.

GEN. LILJEBORGIA, Bate.

1862. *Liljeborgia*, Bate, Catal. Amphip. Brit. Mus., p. 118.  
 1906. *L.*, Stebbing, Das Tierreich, vol. xxi., p. 230.  
 1908. *L.*, Stebbing, S.A. Crustacea, pt. 4, p. 78.  
 1908. *Liljeborgia*, Chevreux, Mém. Soc. Zool. France, vol. xx., p. 475.

\* LILJEBORGIA DUBIA (Haswell).

1880. *Eusirus dubius*, Haswell, Pr. Linn. Soc. N.S. Wales, vol. iv., p. 331, pl. 20, fig. 3.  
 1908. *Liljeborgia dubia*, Stebbing, S.A. Crustacea, pt. 4, p. 78.  
     No. 125, sent by Dr. Gilchrist, from False Bay, Paulsberg, WNW. 1 mile, depth 44 m.  
 1909. *L. d.*, Chilton, Crust. Subantarctic Is. N. Zealand, p. 619.

LILJEBORGIA CONSANGUINEA, Stebbing.

1888. *Liljeborgia consanguinea*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 980, pl. 91.  
 1906. *L. c.*, Stebbing, Das Tierreich, vol. xxi., p. 232.  
 1909. *L. c.*, Strauss, Wissenschaft. Ergebn. der Deutschen Tiefsee Exp., vol. xx., pt. 1, p. 43, text figs. 18A, 18B, pl. 4, fig. 28, pl. 5, fig. 29.

Taken by the trawl at a depth of 565 m., not far from the Agulhas Bank.

FAMILY TIRONIDÆ.

1906. *Tironidæ*, Stebbing, Das Tierreich, vol. xxi., p. 273.  
 1910. *T.*, Stebbing, Thetis Exp. N.S. Wales, Mem. iv., pt. 5, pp. 590, 638.

GEN. TIRON, Lilljeborg.

1865. *Tiron*, Lilljeborg, N. Acta Soc. Upsal., Ser. 3, vol. vi., No. 1, p. 19.  
 1908. *T.*, Stebbing, S.A. Crustacea, pt. 4, p. 79.

\* TIRON AUSTRALIS, Stebbing.

1908. *Tiron australis*, Stebbing, S.A. Crustacea, pt. 4, p. 79, pl. 38.  
     No. 85, sent by Dr. Gilchrist; dredged lat. 33° 9' 30" S., long. 28° 3' 00" E., at a depth of 86 m.



## FAMILY ATYLIDÆ.

1882. *Atylidæ*, Sars, Forh. Selsk. Christian., No. 18, p. 26.

## GEN. NOTOTROPIS, Costa.

1853. *Nototropis*, Costa, Rend. Soc. Borbon., n. ser., vol. ii., pp. 170, 173.

1906. *N.*, Stebbing, Das Tierreich, vol. xxi., pp. 329, 728.

## \* NOTOTROPIS HOMOCHIR (Haswell).

1885. *Atylus homochir*, Haswell, Pr. Linn. Soc. N.S. Wales, vol. x., p. 101, pl. 13, figs. 5-7.

1906. *Nototropis h.*, Stebbing, Das Tierreich, vol. xxi., p. 335, figs. 77, 78.

1910. *N. h.*, Stebbing, S.A. Crustacea, pt. 5.

No. 89, sent by Dr. Gilchrist; dredged between Bird Island and mainland, 18-29 m. depth. A small specimen, in which the slender first gnathopod is rather larger than the second.

## FAMILY PONTOGENEIIDÆ.

1906. *Pontogeneiida*, Stebbing, Das Tierreich, vol. xxi., pp. 356, 729.

1909. *P.*, Chilton, Crust. Subantarct. Is. of N. Zealand, p. 622.

1910. *P.*, Stebbing, Thetis Exp. N.S. Wales, Mem. iv., pt. 2, p. 640.

## GEN. PONTOGENEIA, Boeck.

1871. *Pontogeneia*, Boeck, Forh. Selsk. Christian., 1870, p. 193.

1906. *P.*, Stebbing, Das Tierreich, vol. xxi., p. 359.

## PONTOGENEIA CAPENSIS (Dana).

1853. *Iphimedia capensis*, Dana, U.S. Expl. Exp., vol. xiii., p. 931, pl. 63, fig. 5 a-g.

Near to Cape of Good Hope.

1906. *Pontogeneia c.*, Stebbing, Das Tierreich, vol. xxi., p. 361.

## GEN. PARAMOERA, Miers.

1875. *Paramoera* (part), Miers, Ann. Nat. Hist., Ser. 4, vol. xvi. p. 75.

1906. *P.*, Stebbing, Das Tierreich, vol. xxi., p. 363.

## PARAMOERA AUSTRINA (Bate).

1862. *Atylus austrinus*, Bate, Catal. Amphip. Brit. Mus., p. 137, pl. 26, fig. 4.  
 1888. *Atyloides assimilis*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 918, pl. 77.  
 Cape Agulhas, from screw of H.M.S. *Challenger*.  
 1906. *Paramoera austrina*, Stebbing, Das Tierreich, vol. xxi., p. 363.  
 1909. *P. a.*, Chilton, Crust. Subantarctic Is. N. Zealand, p. 625.  
 Dr. Chilton's discussion of this species should be consulted for fresh light on this species and its synonymy.

## FAMILY GAMMARIDÆ.

1814. *Gammaridæ* (part), Leach, Edinb. Encycl., vol. vii., p. 432.  
 1906. *G.*, Stebbing, Das Tierreich, vol. xxi., pp. 364, 729.  
 1910. *G.*, Stebbing, Thetis Exp. N.S. Wales, Mem. iv., pt. 5, pp. 596, 641.

## GEN. GAMMARUS, Fabricius.

1775. *Gammarus* (part), Fabricius, Systema Entomologiæ, p. 418.  
 1906. *G.*, Stebbing, Das Tierreich, vol. xxi., p. 460, 733.

## GAMMARUS PULEX (Linn.).

1758. *Cancer pulex* (part), Linn., Systema Naturæ, ed. 10, p. 633.  
 1843. *Gammarus p.*, Krauss, Südafrik. Crust., p. 60.

"Found in great numbers in the brackish water of the mouths of many small rivers in Zoetendals Valley, in the Zwellendam district, and probably in all other rivers of the colony." The mention of brackish water throws doubt on the identification.

## GEN. CERADOCUS, Costa.

1853. *Ceradocus*, Costa, Rend. Soc. Borbon., n. ser., vol. ii., p. 170.  
 1908. *C.*, Stebbing, S.A. Crustacea, pt. 4, p. 81.

## \* CERADOCUS RUBROMACULATUS (Stimpson).

1855. *Gammarus rubromaculatus*, Stimpson, Pr. Ac. Sci. Philad., vol. vii., p. 394.  
 1888. *Maera rubromaculata*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1008, pls. 95, 96.  
 Off Cape Agulhas, 274 m.

1893. *Ceradocus rubromaculatus*, Della Valle, F. und Fl. Neapel, vol. xx., p. 720.  
 1906. *C. r.*, Stebbing, Das Tierreich, vol. xxi., p. 430.  
 1908. *C. r.*, Stebbing, S.A. Crustacea, pt. 4, p. 81.  
 No. 30, specimens sent by Dr. Gilchrist, from lat. 30° 49' S., long. 25° 56' E., at 44 m. depth. No. 5694, specimens, taken at low tide in Table Bay, have since been sent me by Dr. Péringuey.

## GEN. MAERA, Leach.

1813. *Maera*, Leach, Edinb. Encycl., vol. vii., p. 403.  
 1906. *M.*, Stebbing, Das Tierreich, vol. xxi., pp. 433, 732, 741.  
 1907. *M.*, von der Brüggen, Annuaire Mus. St. Pétersb., vol. xi., p. 17.  
 1908. *M.*, Pearse, Pr. U.S. Mus., vol. xxxiv., p. 29.

## \* MAERA BRUZELII, Stebbing.

1888. *Maera bruzelii*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1014, pl. 97.  
 Off Cape Agulhas.  
 1906. *M. b.*, Stebbing, Das Tierreich, vol. xxi., p. 741.  
 1910. *M. b.*, Stebbing, S.A. Crustacea, pt. 5.

No. 5694, sent by Dr. Péringuey; taken at low tide in Table Bay. This species, of which the description was accidentally omitted in Das Tierreich, is distinguished from the Australian *M. mastersii* (Haswell) by the first antennæ, which have the secondary flagellum 8-jointed instead of 4-jointed, by the first gnathopods which have the palm finely serrate instead of quadridentate, the side-plate not rotundo-quadrata but strongly produced forward, and by the third uropods, which reach little instead of much beyond the first.

## GEN. ELASMOPUS, Costa.

1853. *Elasmopus*, Costa, Rend. Soc. Borbon., n. ser., vol. ii., pp. 170, 175.  
 1906. *E.*, Stebbing, Das Tierreich, vol. xxi., pp. 441, 732.  
 1908. *E.*, Chevreux, Mém. Soc. Zool. France, vol. xx., p. 483.

## \* ELASMOPUS SUBCARINATUS (Haswell).

1879. *Megamoera subcarinata*, Haswell, Pr. Linn. Soc. N.S. Wales, vol. iv., p. 335, pl. 24, fig. 4.

1906. *Elasmopus subcarinatus*, Stebbing, Das Tierreich, vol. xxi., p. 441.

1909. *E. s.*, Walker, Tr. Linn. Soc. London, vol. xii., p. 335.

1910. *E. s.*, Stebbing, S.A. Crustacea, pt. 5.

No. 89, sent by Dr. Gilchrist, dredged between Bird Island and mainland, between 18 and 29 m. depth. A small male specimen retaining in spirit a pink tinge along the back, the second gnathopod agreeing with that described and figured by Mr. A. O. Walker in 1904, Herdman's Ceylon Pearl Fish., vol. ii., p. 275, pl. 5, fig. 34.

#### GEN. ELASMOPOIDES, Stebbing.

1890. *Elasmopoides*, Stebbing, S.A. Crustacea, pt. 4, p. 81.

#### \* ELASMOPOIDES CHEVREUXI, Stebbing.

1908. *Elasmopoides chevreuxi*, Stebbing, S.A. Crustacea, pt. 4, p. 82, pl. 39.

No. 85, sent by Dr. Gilchrist, dredged in lat. 33° 9' 30" S., long. 28° 3' 00" E., at 86 m. depth.

### FAMILY TALITRIDÆ.

1906. *Talitridæ*, Stebbing, Das Tierreich, vol. xxi., pp. 523, 735.

1909. *T.*, Chilton, Crust. Subantarctic Is. N. Zealand, p. 632.

#### GEN. ORCHESTIA, Leach.

1813. *Orchestia*, Leach, Edinb. Encycl., vol. vii., p. 402.

1906. *O.*, Stebbing, Das Tierreich, vol. xxi., pp. 535, 735.

1908. *O.*, Walker, Ann. Nat. Hist., Ser. 8, vol. ii. p. 36.

1908. *O.*, Chevreux, Mém. Soc. Zool. France, vol. xx., p. 491.

#### ORCHESTIA BOTTÆ, Milne-Edwards.

1840. *Orchestia bottæ*, Milne-Edwards, Hist. Nat. Crust., vol. iii., p. 17.

1843. *O. b.*, Krauss, Südafrik. Crust., p. 60.

#### ORCHESTIA CAPENSIS, Dana.

1853. *Orchestia capensis*, Dana, U.S. Expl. Exp., vol. xiii., p. 866, pl. 58, fig. 3 a-b.



GEN. ORCHESTOIDEA, Nicolet.

1849. *Orchestoidea*, Nicolet, Gay's Historia y politica de Chile, Zool. vol. iii., p. 229.  
1906. *O.*, Stebbing, Das Tierreich, vol. xxi., p. 527.

ORCHESTOIDEA FISCHERII (Milne-Edwards).

- ? 1828. *Orchestia fischerii*, M.-Edw., Mém. Soc. Hist. Nat. Paris, vol. v., pl. 25, fig. 14.  
1836. *O. f.*, Guérin, Iconographie du Règne Animal, pl. 26, fig. 3, and 1843, Explication des planches, p. 22.  
From Cape of Good Hope.

GEN. TALORCHESTIA, Dana.

1852. *Talorchestia*, Dana, Amer. J. Sci., Ser. 2, vol. xiv., p. 310.  
1906. *T.*, Stebbing, Das Tierreich, vol. xxi., pp. 543, 735.  
1908. *T.*, Chevreux, Mém. Soc. Zool. France, vol. xx., p. 495.

TALORCHESTIA (?) AFRICANA, Bate.

1862. *Talorchestia (?) africana*, Bate, Catal. Amphip. Brit. Mus., p. 15, pl. 2, fig. 6.  
Port Natal.

GEN. NEOBULE, Haswell.

1879. *Neobule*, Haswell, Pr. Linn. Soc. N.S. Wales, vol. iv., p. 255.

NEOBULE REYNAUDII (Milne-Edwards).

1830. *Amphithoe reynaudii*, M.-Edw., Ann. Sci. Nat., vol. xx., p. 378.  
Cape of Good Hope.  
1906. *Neobule r.*, Stebbing, Das Tierreich, vol. xxi., p. 557.

FAMILY AORIDÆ.

1899. *Aoridæ*, Stebbing, Ann. Nat. Hist., Ser. 7, vol. iv., p. 211.  
1906. *A.*, Stebbing, Das Tierreich, vol. xxi., pp. 585, 736.  
1910. *A.*, Stebbing, Thetis Exp. N.S. Wales, Mem. iv., pt. 5, pp. 605, 647.

GEN. AORA, Kröyer.

1845. *Aora*, Kröyer, Naturhist. Tidsskrift, Ser. 2, vol. i., p. 328.

## \* AORA TYPICA, Kröyer.

1845. *Aora typica*, Kröyer, Naturhist. Tidsskr., Ser. 2, vol. i., p. 328,  
pl. 3, fig. 3 a-l.
1908. *A. t.*, Stebbing, S.A. Crustacea, pt. 4, p. 84.  
No. 111, sent by Dr. Gilchrist, from Table Mountain,  
E. 41 miles, reputed depth 448 m.
1909. *A. t.*, Chilton, Crust. Subantarctic Is. N. Zealand, p. 645.

## GEN. LEMBOS, Bate.

1857. *Lembos* (part), Bate, Ann. Nat. Hist., Ser. 2, vol. xix.,  
p. 142.
1906. *L.*, Stebbing, Das Tierreich, vol. xxi., pp. 594, 737.
1909. *L.*, Walker, Tr. Linn. Soc. London, vol. xii., p. 338.

## LEMBOS HIRSUTIPES, Stebbing.

1895. *Lembos hirsutipes*, Stebbing, Ann. Nat. Hist., Ser. 6, vol. xvi.,  
p. 207, pls. 8, 9B.  
Off Cape of Good Hope.

## GEN. LEMBROIDES, Stebbing.

1895. *Lemboides*, Stebbing, Ann. Nat. Hist., Ser. 6, vol. xvi., p. 209.

## LEMBROIDES AFER, Stebbing.

1895. *Lemboides afer*, Stebbing, Ann. Nat. Hist., Ser. 6, vol. xvi.,  
p. 209, pls. 9A, 10.  
Off Cape of Good Hope.

## FAMILY PHOTIDÆ.

1872. *Photidæ* (part), Boeck, Skand. Arkt. Amphip., vol. i., p. 74.
1906. *P.*, Stebbing, Das Tierreich, vol. xxi., pp. 603, 737.
1910. *P.*, Stebbing, Thetis Exp. N.S. Wales, Mem. iv., pt. 5,  
pp. 605, 648.

## GEN. EURYSTHEUS, Bate.

1857. *Eurystheus*, Bate, Ann. Nat. Hist., Ser. 2, vol. xix.,  
p. 143.
1908. *E.*, Stebbing, S.A. Crustacea, pt. 4, p. 84.

1908. *E.*, Holmes, Pr. U.S. Mus., vol. xxiv., p. 541.  
 1909. *E.*, Walker, Tr. Linn. Soc. London, vol. xii., p. 340.

\* EURYSTHEUS AFER (Stebbing).

1888. *Gammaropsis afra*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1097, pl. 113.

Cape Agulhas, from 270 m. depth.

1906. *Eurystheus afer*, Stebbing, Das Tierreich, vol. xxi., p. 612.

1908. *E. a.*, Stebbing, S.A. Crustacea, pt. 4, p. 87.

Nos. 85, 89, specimens sent by Dr. Gilchrist; No. 85 from lat.  $33^{\circ} 9' 30''$  S., long.  $28^{\circ} 3' 00''$  E., depth 86 m.; No. 89 from between Bird Island and mainland, depth 18-29 m.

\* EURYSTHEUS ATLANTICUS (Stebbing).

1888. *Gammaropsis atlantica*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1101, pl. 114.

1908. *Eurystheus atlanticus*, Stebbing, S.A. Crustacea, pt. 4, p. 86, pl. 40B.

Taken at the same two stations as the preceding species, of which it is perhaps only a variety.

\* EURYSTHEUS HOLMESI, Stebbing.

1908. *Eurystheus holmesi*, Stebbing, S.A. Crustacea, pt. 4, p. 85, pl. 40A.

No. 89, sent by Dr. Gilchrist, dredged between Bird Island and the mainland, 18-29 m. depth.

GEN. CHEIRIPHOTIS, Walker.

1904. *Cheiriphotis*, Walker, Herdman's Ceylon Pearl Fish., vol. ii., pp. 234, 283.

1906. *C.*, Stebbing, Das Tierreich, vol. xxi., p. 737.

\* CHEIRIPHOTIS MEGACHELES (Giles).

1885. *Melita megacheles*, Giles, Journal Asiatic Society of Bengal, vol. liv., p. 70, pl. 3.

1904. *Cheiriphotis m.*, Walker, Herdman's Ceylon Pearl Fish., vol. ii., p. 284, pl. 6, fig. 42.

1906. *C. m.*, Stebbing, Das Tierreich, vol. xxi., p. 737.

1910. *C. m.*, Stebbing, S.A. Crustacea, pt. 5.

No. 89, a male specimen, sent by Dr. Gilchrist; dredged between Bird Island and mainland, 18-29 m. depth.

## FAMILY AMPITHOIDÆ.

1906. *Ampithoidæ*, Stebbing, Das Tierreich, vol. xxi., pp. 631, 738.

## GEN. AMPITHOE, Leach.

1813. *Ampithœ*, Leach, Edinb. Encycl., vol. vii., p. 403.  
 1906. *Ampithoe*, Stebbing, Das Tierreich, vol. xxi., p. 631.  
 1909. *Amphithoe*, Walker, Tr. Linn. Soc. London, vol. xii., p. 342.

## \* AMPITHOE INTERMEDIA (Walker).

1904. *Amphithoë intermedia*, Walker, Herdman's Ceylon Pearl Fish., vol. ii., p. 290, pl. 7, fig. 46.  
 1906. *Ampithoe i.*, Stebbing, Das Tierreich, vol. xxi., p. 738.  
 1908. *Amphithoe i.*, Chevreux, Mém. Soc. Zool. France, vol. xx., p. 515, fig. 29.  
 1909. *A. i.*, Walker, Tr. Linn. Soc. London, vol. xii., pp. 326, 341.  
 1910. *Ampithoe i.*, Stebbing, S.A. Crustacea, pt. 5.  
 No. 89, sent by Dr. Gilchrist; dredged between Bird Island and mainland, 18-29 m. depth. These specimens do not appear to be specifically distinguishable from Mr. A. O. Walker's *A. intermedia*.

## FAMILY JASSIDÆ.

1906. *Jassidæ*, Stebbing, Das Tierreich, vol. xxi., pp. 647, 739.

## GEN. JASSA, Leach.

1814. *Jassa*, Leach, Edinb. Encycl., vol. vii., p. 433.  
 1906. *J.*, Stebbing, Das Tierreich, vol. xxi., pp. 652, 739.

## JASSA PULCHELLA, Leach.

1814. *Jassa pulchella*, Leach, Edinb. Encycl., vol. vii., p. 433.  
 1888. *Podocerus falcatus*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1132, pl. 119.  
 From screw of H.M.S. *Challenger*, off Cape of Good Hope.  
 1906. *Jassa pulchella*, Stebbing, Das Tierreich, vol. xxi., p. 654.  
 1909. *J. p.*, Chilton, Crust. Subantarctic Is. N. Zealand, p. 647.

## FAMILY COROPHIIDÆ.

1888. *Corophiidæ*, Stebbing, Das Tierreich, vol. xxi., pp. 662, 739.



GEN. CAMACHO, Stebbing.

1888. *Camacho*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1178.

\* CAMACHO BATHYPLOUS, Stebbing.

1888. *Camacho bathyploous*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1179, pl. 127.  
1908. S.A. Crustacea, pt. 4, p. 87.

No. 85, sent by Dr. Gilchrist; dredged in lat.  $33^{\circ} 9' 30''$  S., long.  $28^{\circ} 3' 00''$  E., in 86 m. depth. The eyes, wanting probably by post-mortem disappearance in the Challenger specimen, were here distinct, though small.

GEN. ERICTHONIUS, Milne-Edwards.

1830. *Erichthonius*, Milne-Edwards, Ann. Sci. Nat., vol. xx., p. 382.  
1906. *E.*, Stebbing, Das Tierreich, vol. xxi., pp. 670, 740.

\* ERICTHONIUS BRASILIENSIS (Dana).

1853. *Pyctilus brasiliensis*, Dana, U.S. Expl. Exp., vol. xiii., p. 976, pl. 67, fig. 5 *a-h*.  
1906. *Erichthonius b.*, Stebbing, Das Tierreich, vol. xxi., p. 671.  
1909. *E. b.*, Walker, Tr. Linn. Soc. London, vol. xii., p. 343.  
1910. *E. b.*, Stebbing, S.A. Crustacea, pt. 5.  
No. 89, sent by Dr. Gilchrist; dredged between Bird Island and mainland, 18-29 m. depth.

FAMILY CHELURIDÆ.

1847. *Cheluridæ*, Allman, Ann. Nat. Hist., vol. xix., p. 361.  
1906. *C.*, Stebbing, Das Tierreich, vol. xxi., p. 693.

GEN. CHELURA, Philippi.

1839. *Chelura*, Philippi, Arch. Naturg., vol. v., pt. 1, p. 120.  
1906. *C.*, Stebbing, Das Tierreich, vol. xxi., p. 693.  
1910. *C.*, Calman, Ann. Nat. Hist., Ser. 8, vol. v., p. 182.

CHELURA TEREBRANS, Philippi.

1839. *Chelura terebrans*, Philippi, Arch. Naturg., vol. v., pt. 1, p. 120, pl. 3, fig. 5.

1893. *C. t.*, Hammersley-Heenan, Trans. South African Phil. Soc., vol. v., pt. 2, p. 316.

Port Elizabeth. The specimens were found in conjunction with *Teredo navalis*, destroying green-heart timber of piles at the port.

### FAMILY PODOCERIDÆ.

1906. *Podoceridæ*, Stebbing, Das Tierreich, vol. xxi., pp. 694, 741.  
1910. *P.*, Stebbing, Thetis Exp. N.S. Wales, Mem. iv., pt. 5, pp. 622, 650.

### GEN. LÆTMATOPHILUS, Bruzelius.

1859. *Lætmatophilus*, Bruzelius, Svenska Ak. Handl., n. ser., vol. iii., No. 1, p. 10.  
1906. *L.*, Stebbing, Das Tierreich, vol. xxi., p. 695.

### LÆTMATOPHILUS PURUS, Stebbing.

1888. *Lætmatophilus purus*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1198, pl. 132.  
Off Cape of Good Hope.

### TRIBE CYAMIDEA.

1852. *Caprellidea*, Dana, Amer. Journ. Sci. and Arts, Ser. 2, vol. xiv., p. 307.  
1876. *Caprellina*, Boeck, De Skandinaviske og Arktiske Amphipoder, vol. ii., p. 668.  
1888. *C.*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1226.  
1906. *Caprellidea*, Das Tierreich, vol. xxi., p. 4.

The definition given under the last reference allows the palp of the maxillipeds from one to four joints, but Dr. Mayer in his supplementary monograph, p. 147, 1890, mentions that the palp entirely disappears in *Cyamus globicipitis*. *Cyamus*, as the oldest genus, should give its name to the tribe.

### FAMILY CAPRELLIDÆ.

1847. *Caprellidæ*, White, List of Crustacea in Brit. Mus., p. 91.  
1882. *C.*, Mayer, F. und Fl. Neapel, vol. vi., p. 17.

1900. C., Mayer, F. und Fl. Neapel, vol. xvii.

In this "Nachtrag zu den Caprelliden" I cannot find the Latin term Caprellidæ anywhere actually used by Dr. Mayer.

1903. C., Mayer, Die Caprellidæ der Siboga Expedition, p. 3.

In this and the two preceding works probably everything of any importance that has been written on this family down to 1903 will be found taken into consideration.

1910. C., Stebbing, Thetis Exp. N.S. Wales, Mem. iv., pt. 5, pp. 629, 651.

The words "*Family* CAPRELLIDÆ," which should have formed the fifth line on p. 629, were accidentally omitted.

#### GEN. CAPRELLA, Lamarek.

1801. *Caprella*, Lamarek, Système des Animaux sans Vertèbres, p. 165.  
 1888. C., Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1251.  
 1903. C., Mayer, Siboga Exp., pp. 14, 72.

#### \* CAPRELLA PENANTIS, Leach.

1813. *Caprella penantis*, Leach, Edinb. Encycl., vol. vii., p. 404.  
 1816. *C. acutifrons*, Latreille, Nouveau Dict. d'Hist. Nat., vol. v., p. 433.  
 1888. *C. penantis*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1694.  
 1903. *C. acutifrons*, Mayer, Siboga Exp., p. 79, pl. 3, figs. 4-28, pl. 7, figs. 62-65.

Of this species Dr. Mayer describes on p. 81, "Var.  $\lambda$  *natalensis* (pl. 3, figs. 22 and 23). From the Stockholm Museum, collected by Vahlberg in Port Natal, a male about 13 mm. long, quite smooth, only on the fourth segment a postero-dorsal tubercle, which however is sometimes only a little prominent. The front antennæ moderately thickened, the flagellum with 13 (in the female 11) articulations; hinder antennæ longer than the combined first and second joints of the front pair. Large grasping hand not setose; venom-tooth proximal; inner margin of the finger angular. On the peræopods both clasping-spines proximal; truncate spines more on the outer side, 6-8 (very difficult to count). A single male, which probably also belongs here, I found in material from Cape Town (collected by W. I. Issaef, 15/12/1888,

together with *C. cicur*). In Natal another variety occurs." On p. 86 Mayer explains that the material of the latter only included immature specimens, not suitable for description. On p. 81 he describes Var.  $\mu$  *porcellio*. Concerning this he writes: "I am indebted to F. Purcell for about 50 specimens; it is reported to be very common on green algæ in Kalk Bay (Cape Peninsula, 'between tide-marks in rock-pools'). The old males are especially striking by the form of the venom-tooth (pl. 3, fig. 15). Length of the male about 9, of the female about 6 mm."

1910. *C. penantis*, Stebbing, S.A. Crustacea, pt. 5.

No. 88, a specimen representing Mayer's var. *porcellio* has been sent me by Dr. Gilchrist; taken off Port Elizabeth, from a depth between 24 and 27 m.

\* *CAPRELLA EQUILIBRA*, Say.

1818. *Caprella equilibra*, Say, Journ. Ac. Sci. Philad., vol. i., p. 391.

1888. *C. e.*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1254.

From screw of H.M.S. *Challenger*, off Cape of Good Hope.

1903. *C. æquilibra*, Mayer, Siboga Exp., pp. 75, 89, pl. 3, figs. 29-34, pl. 7, figs. 66-69.

From False Bay, "on green seaweed in pools between tide marks, Kalk Bay, collected by F. Purcell, 6, 1896"; two males, one with regenerated great grasping hand, having the palm margin smooth, the clasping spine only indicated.

*CAPRELLA SOLITARIA*, Stimpson.

1855. *Caprella solitaria*, Stimpson, P. Ac. Philad., vol. vii., p. 393.

Simon's Bay, Cape. This is regarded by Mayer as absolutely unrecognisable, from insufficient description.

\* *CAPRELLA CICUR*, Mayer.

1903. *Caprella cicur*, Mayer, Siboga Exp., pp. 75, 97, pl. 4, figs. 5-7, pl. 8, figs. 3-5.

The localities are given as follows: "'On back of a *Palinurus Lalandei*. Table Bay June 1897,' collected by W. F. Purcell," and "Cape Town, collected by W. J. Issaef, 15/12/1888 (5♂ 2♀, together with *C. acutifrons*)."

1910. *C. c.*, Stebbing, S.A. Crustacea, pt. 5.



The host above-mentioned should be called *Jasus lalandii* (Milne-Edwards). The species has been sent by Dr. Gilchrist from two gatherings: No. 88, off Port Elizabeth, depth between 24 and 27 m.; and No. 89, between Bird Island and the mainland, 18-29 m. depth. The short arm or second joint of the second gnathopods has the front margin sculptured, forming about sixteen decurrent rounded teeth; the proximal process of the sixth joint in the hinder peræopods carries a pair of short distally serrate clasping spines.

CAPRELLA FALSA, Mayer.

1903. *Caprella falsa*, Mayer, Siboga Exp., pp. 75, 101, pl. 4, fig. 15.

From False Bay. This species seems scarcely distinguishable from the supposed abnormal form of *C. cicur*, figured by Mayer on his pl. 4, fig. 6, so far as can be judged by a comparison of that figure with fig. 15, representing *C. falsa* on the same plate.

\* CAPRELLA LÆVIPES, Mayer.

1903. *Caprella lævipes*, Mayer, Siboga Exp., pp. 74, 108, pl. 5, fig. 2, pl. 8, figs. 14-16.

From the Stockholm Museum, collected by Vahlberg at Port Natal; numerous specimens found by W. F. Purcell, "clinging to the back of an Asteroid starfish," in Kalk Bay, part of False Bay.

\* CAPRELLA TRIODOUS, n. sp.

Plate XLVIII.B.

1910. *Caprella triodous*, n. sp., S.A. Crustacea, pt. 5.

This species shows a great general resemblance to Dr. Mayer's *C. lævipes*, but appears to be clearly distinguished from it by the following differences. There is no frontal process; the flagellum of the first antennæ is twelve-jointed, whereas in *C. lævipes* Dr. Mayer, who had very many specimens for comparison, states that it is eight-jointed in both sexes; here the second antennæ do not nearly reach the end of the peduncle of the first, instead of reaching beyond it; the elongate hand of the second gnathopods, which as in the other species has the hind margin distally divided into three teeth, differs by having the front margin distally angled instead of rounded; lastly, of the hinder peræopods at least the third and fourth pairs have the process of the sixth joint armed

with a pair of serrate-ended clasping spines, which are wanting in Dr. Mayer's species. The fifth peræopods were missing. Length of body, 7 mm.

No. 88, sent by Dr. Gilchrist; from a depth between 24 and 27 m., off Port Elizabeth, lat.  $33^{\circ} 59' 00''$  S., long.  $25^{\circ} 51' 45''$  E. The specific name alludes to the three very prominent teeth in the second gnathopod of the adult male.

#### GEN. PHTISICA, Slabber.

1769. *Phtisica*, Slabber, *Natuurkundige Verlostingen*, pt. 10, p. 77.  
 1814. *Proto*, Leach, *Edinb. Encycl.*, vol. vii., p. 433.  
 1888. *Phtisica*, Stebbing, *Challenger Amphipoda, Reports*, vol. xxix., pp. 32, 39, 1718, 1720.  
 1899. *Squilla*, M. J. Rathbun, *Journ. Inst. Jamaica*, vol. ii., p. 628.  
 1903. *Proto*, Mayer, *Siboga Exp.*, pp. 15, 19.  
 1900. *Phtisica*, Chevreux, *Camp. Sci. Monaco*, fasc. xvi., p. 118.

#### \* PHTISICA MARINA, Slabber.

1769. *Phtisica marina*, Slabber, *Nat. Verlost.*, pt. 10, p. 77, pl. 10, figs. 1, 2.  
 1776. *Squilla ventricosa*, O. F. Müller, *Zoologiæ Danicæ Prodrömus*, No. 2360, p. 360.  
 1871. *Proto v.*, Boeck, *Vid. Selsk. Forhandlinger for 1870*, p. 268 (188).  
 1903. *P. v.*, Mayer, *Siboga Exp.*, p. 20, pl. 6, fig. 23.  
 1910. *Phtisica marina*, Stebbing, *S.A. Crustacea*, pt. 5.  
 No. 127, sent by Dr. Gilchrist, from 55 m. depth, Sebastian Bluff NW. by N.  $\frac{1}{2}$  N. Distant  $3\frac{1}{2}$  miles.

#### GEN. METAPROTELLA, Mayer.

1890. *Metaprotella*, Mayer, *Fauna und Flora Neapel*, vol. xvii., p. 24.  
 1903. *M.*, Mayer, *Caprellidæ der Siboga Exp.*, vol. xxxiv., pp. 14, 39.

The distinguishing characters of this genus appear to be as follows: The flagellum of the second antennæ is two-jointed; the mandibular palp is three-jointed; there are branchial vesicles only on the third and fourth segments of the peræon, and in connexion with these vesicles there are single-jointed quite rudimentary limbs; the third peræopods are normal; pleon in the male with one pair of appendages; sixth and seventh segments of peræon in coalescence.

It is on the last character that Dr. Mayer lays most stress.

This feature unfortunately is not very obvious in the species to be described. Both the segments, however, are short, and, though distinct in outline, were apparently not movable one upon the other.

\* METAPROTELLA MAKRODACTYLOS, n. sp.

Plate XLVIII.A.

This species cannot, I think, be confused with *M. africana*, Mayer, from Djibouti, nor yet with Mayer's other species *M. sandalensis*, from the Loyalty Islands, though, as might be expected if they belong to the same genus, there are many points of resemblance. The greater distinctness of the sixth and seventh segments of the peræon will probably suffice to separate this species from earlier members of the genus. The head has a forward-pointing process or tooth, but no other dorsal projections. In the first antennæ the second joint is much longer than the first or third, about as long as the nine-jointed flagellum. In the second antennæ the gland-cone of the second joint is conspicuous, the fifth joint is much longer than the fourth, both having a sparse armature of setæ. The mandibles have the two cutting plates pretty well developed, with a few spines between them and the molar. The third joint of the palp has the scymetar-shape represented by Mayer for the corresponding part in *M. sandalensis*, with several very short setæ between two long ones at the distal end. The maxillipeds also nearly resemble those figured by Mayer for the same species, but the membranaceous plate of the third joint, though in like manner distally notched for a single spine, has the inner margin also notched a little way from the end, the remainder being microscopically divided into three denticles. First gnathopods very small, palm microscopically pectinate, and reaching to a defining spine at the very base of the joint, and matched by the finger, the inner margin of which is fringed with spine-teeth. Second gnathopods large, the slender second joint having a small process projecting from base of front margin, and the distal part a little swollen, the fifth joint very inconspicuous, the sixth very long, with small process at base of the setulose hind margin which ends in a very pronounced acute tooth, not far from the base of the finger; the finger long, so that its curved sharp apex reaches the process at the base of the sixth joint. First and second peræopods minute, ending in two or three setules. Third and fourth peræopods normal, the sixth joint with projection near the base, carrying a couple of spines, which are apparently simple, not serrate at the ends, but similar to the spines which follow along the inner

margin. The character of the fifth pair not clearly ascertained. Pleon with one pair of appendages.

The single specimen, a male, was 6 mm. in length, with first antennæ about 3 mm. long. It was obtained by Dr. Gilchrist, between Bird Island and the mainland, from 18–29 m. depth. No. 89.

The specific name from the Greek *μακροδάκτυλος* refers to the great length of the finger in the second gnathopods.

GEN. METAPROTO, Mayer.

1903. *Metaproto*, Mayer, Siboga Exp., pp. 14, 15, 26.

METAPROTO NOVÆ-HOLLANDIÆ (Haswell).

1880. *Proto novæ-hollandiæ*, Haswell, Pr. Linn. Soc. N.S.W., vol. iv., p. 275, pl. 12, fig. 3.

1888. *Proto n.-h.*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1230.

1903. *Metaproto n.-h.*, Mayer, Siboga Exp., pp. 26, 137, pl. 1, figs. 11, 12, pl. 6, figs. 24–28, pl. 9, figs. 3, 50.

On p. 137 Dr. Mayer enters this species with ?? as coming from Simon's Bay.

GEN. CAPRELLINA, G. M. Thomson.

1879. *Caprellina*, Thomson, Tr. N. Zealand Inst., vol. xi., p. 247.

1888. *Caprellinopsis*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., pp. 233, 1237, 1268.

1903. *Caprellina*, Mayer, Siboga-Exp., pp. 14, 15, 30.

\* CAPRELLINA LONGICOLLIS (Nicolet).

1849. *Caprella longicollis*, Nicolet, Gay's Historia fis. y pol. de Chile, vol. iii., p. 251, pl. 4, figs. 3, *a–c*.

1849. *C. brevicollis*, Nicolet, Gay's Hist. Chile, vol. iii., p. 253, pl. 4, fig. 4, *a, b*.

1879. *Caprellina novæ-zealandiæ*, Thomson, Tr. N. Zealand Inst., vol. xi., p. 247, pl. 100, fig. 6, *a–d*.

1882. *C. longicollis*, Mayer, F. und Fl. Neapel, vol. vi., p. 27, figs. 4, 5, in text.

1903. *C. l.*, Mayer, Siboga Exp., pp. 30, 137.

Dr. Mayer says: "From the Cape Town Museum W. F. Purcell has sent me among other Caprellidæ some twenty



*Caprellina*, which appear to form a somewhat stouter variety of *longicollis*."

1909. *Caprellinopsis* l., Chilton, Crust. Subantarctic Is. of N. Zealand, p. 648.

1910. *Caprellina* l., Stebbing, S.A. Crustacea, pt. 5.

Specimens sent by Dr. Gilchrist; No. 89, from depth between 18 and 29 m., between Bird Island and mainland; No. 88, taken off Port Elizabeth, between 24 and 27 m. depth. A female carrying young ones was observed to have a 7-jointed flagellum to the first antennæ, the first of these joints being evidently a composite of four incipient joints. Young taken from the marsupium already showed the generic character.

#### GEN. PARADEUTELLA, Mayer.

1890. *Paradeutella*, Mayer, F. und Fl. Neapel, vol. xvii., p. 29.

1903. *P.*, Mayer, Siboga Exp., pp. 14, 16, 45.

#### \* PARADEUTELLA SERRATA, Mayer.

1903. *Paradeutella serrata*, Mayer, Siboga Exp., pp. 45, 47, 137, pl. 2, fig. 2, pl. 6, figs. 68, 69.

"On green seaweed in pools, between tide-marks. Kalk Bay (part of False Bay)." Collected by W. F. Purcell.

### FAMILY CYAMIDÆ.

1847. *Cyamidæ*, White, List of Crustacea in Brit. Mus., p. 92.

1873. *C.*, Lütken, Vid. Selsk. Skr., Ser. 5, vol. x., pt. 3, p. 246 (18).

This treatise gives an invaluable summary of the literature concerned with this family down to the time of writing.

1882. "*Cyamiden*," Mayer, F. und Fl. Neapel, vol. vi., p. 185.

1890. *C.*, Mayer, F. und Fl. Neapel, vol. xvii., p. 145.

1903. *C.*, Mayer, Siboga Exp., p. 153.

#### GEN. CYAMUS.

1796. *Cyamus*, Latreille, Précis caract. génériques des Insectes, p. 199, An. 5 de la R.

Lütken gives the date of this treatise as 1797, but Latreille in *Le Règne Animal*, vol. iii., p. 382, 1830, gives it as 1796, and this date is confirmed by Sherborn in his *Index Animalium*.

1873. *C.*, Lütken, Vid. Selsk. Skr., Ser. 5, vol. x., pt. 3, p. 229 (1).

1887. *C.*, Lütken, Vid. Selsk. Skr., Ser. 6, vol. iv., pt. 4, p. 315 (1).  
 1890. *C.*, Mayer, F. und Fl. Neapel, vol. xvii., p. 146.  
 1893. *C.*, Lütken, Vid. Selsk. Skr., Ser. 6, vol. vii., pt. 9, p. 419 (1).

\* *CYAMUS OVALIS*, Roussel de Vauzème.

1834. *Cyamus ovalis*, R. de Vauzème, Ann. Sci. Nat., Ser. 2, vol. i.,  
 p. 259, pl. 8, figs. 1–21.  
 1843. *C. o.*, Krauss, Südafrik. Crust., p. 61.

Of this and the next species Krauss says: "I found both species on a whale stranded in Table Bay."

1862. *C. o.*, Bate, Catal. Amphip. Brit. Mus., p. 367, pl. 58, fig. 3.

Bate says: "The figure and description are taken from a specimen from the Cape of Good Hope that was entrusted to me from the Jardin des Plantes." He also gives White as an authority for the occurrence of the species on the British coast. Lütken at first discredited this, but later admitted its possibility.

1873. *C. o.*, Lütken, Vid. Selsk. Skr., Ser. 5, vol. x., pt. 3, p. 267 (39),  
 pl. 2, fig. 4.  
 1910. *C. o.*, Stebbing, S.A. Crustacea, pt. 5.

This species, sent by Dr. Péringuey, was obtained from the head of *Balaena australis*, at Cape Town. It has the branchial vesicles doubles, which in the male are accompanied by accessory appendages, single on the first pair but double on the second. The third thoracic segment in the male is laterally produced both forward and backward, the following segment only backward.

\* *CYAMUS ERRATICUS*, Roussel de Vauzème.

1834. *Cyamus erraticus*, R. de Vauzème, Ann. Sci. Nat., Ser. 2, vol. i.,  
 p. 259, pl. 8, figs. 22, 23.  
 1843. *C. e.*, Krauss, Südafrik. Crust., p. 61.

Krauss found it less abundant than the preceding species on the whale in Table Bay.

1873. *C. e.*, Lütken, Vid. Selsk. Skr., Ser. 5, vol. x., p. 260 (32), pl. 3,  
 fig. 5.  
 1893. *C. e.*, Lütken, Vid. Selsk. Skr., Ser. 6, vol. vii., pt. 9, p. 430  
 (12).  
 1910. *C. e.*, Stebbing, S.A. Crustacea, pt. 5.

Specimens sent by Dr. Péringuey were taken from the tail parts of *Balaena australis*, stranded at Cape Town. Others

sent by Mr. W. H. Bell-Marley were found on "hump-back" whale at Durban. In this species the branchiæ are very long, single cylinders, with short accessory appendages which are double in the male, single in the female.

\* CYAMUS GRACILIS, Roussel de Vauzème.

1834. *Cyamus gracilis*, R. de Vauzème, Ann. Sci. Nat., Ser. 2, vol. i., p. 259, pl. 8, figs. 24, 25.  
 1862. *C. g.*, Bate, Catal. Amphip. Brit. Mus., p. 366, pl. 58, fig. 1.  
 "Cape of Good Hope (*Paris Collection*)."  
 1873. *C. g.*, Lütken, Vid. Selsk. Skr., Ser. 5, vol. x., p. 278 (50), pl. 4, fig. 10.  
 1910. *C. g.*, Stebbing, S.A. Crustacea, pt. 5.

No. 38, sent by Dr. Gilchrist, from "Right Whale" in False Bay. This species has the branchial cylinders single, not very long, with small double accessory appendages in the male, but none in the female. The sixth joint of the gnathopods has a single tooth in the adult males, but none in the females.

\* CYAMUS BOOPIS, Lütken.

1873. *Cyamus boopis*, Lütken, Vid. Selsk. Skr., Ser. 5, vol. x., p. 264 (36), p. 262 (34), pl. 3, fig. 6, and *C. pacificus*, Lütken, pl. 3, fig. 7.  
 1887. *C. b.*, Lütken, Vid. Selsk. Skr., Ser. 6, vol. iv., pt. 4, p. 318 (4).  
 1910. *C. b.*, Stebbing, S.A. Crustacea, pt. 5.

No. 2, specimens sent by Dr. Gilchrist, "from skin of a Balænoptera [q. Megaptera] (humpback whale)," appear to agree with Lütken's account of this species, from which he at one time hesitatingly distinguished *C. pacificus*.

## TRIBE PHRONIMIDEA.

1852. *Hyperidea*, Dana, Amer. Journ. Sci. and Arts, Ser. 2, vol. xiv., p. 314.  
 1890. *Hyperidea*, Sars, Crustacea of Norway, vol. i., p. 5.  
 1906. *H.*, Stebbing, Das Tierreich, vol. xxi., p. 5.  
 1910. *H.*, Stebbing, Thetis Exp. N.S. Wales, Mem. iv., pt. 5, p. 654.

Consistency requires that this tribe should be named Phronimidea, from *Phronima*, the oldest of its genera.

## FAMILY VIBILIIDÆ.

1872. *Vibilidæ*, Claus, Grundzüge der Zoologie, ed. 2, p. 236.  
 1885. *Vibiliidæ*, Carus, Prodrömus Faunæ Mediterraneæ, vol. i., p. 421.  
 1887. *Vibilidæ*, Bovallius, K. Svenska Vet. Ak. Handlingar, vol. xxi., No. 5, p. 42.  
 1905. V., Chevreux, Bull. Mus. Océanogr., Monaco, vol. iii., No. 49, p. 1.  
 1907. *Vibiliidæ*, A. O. Walker, Amphipoda, Nat. Antarctic Exp., p. 6.

## GEN. VIBILIA, Milne-Edwards.

1830. *Vibilia*, Milne-Edwards, Ann. Sci. Nat., vol. xx., p. 386.

## VIBILIA sp.

1888. *Vibilia* sp., Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1294.  
 South Atlantic, lat. 35° 0' S., long. 17° 57' E. A specimen mounted in Canada balsam.

## FAMILY CYSTISOMATIDÆ.

1910. *Cystisomatidæ*, Stebbing, Thetis Exp. N.S. Wales, Mem. iv., pt. 5, p. 654.

## GEN. CYSTISOMA, Guérin-Méneville.

1842. *Cystisoma*, Guérin-Méneville, Revue zoologique, p. 214.  
 1888. C., Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1318.

## CYSTISOMA SPINOSUM (Fabricius).

1775. *Oniscus spinosus*, Fabricius, Systema Entomologiæ, p. 298.  
 1842. *Cystisoma neptunus*, Guérin-Méneville, Revue zool., p. 214, pl. 1, fig. 1.  
 1888. C. *spinosum*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., pp. 1319, 1334, pl. 154.

An unpublished figure apparently referable to this species was drawn by Sir J. D. Hooker when, as a very young man, he took part in an Antarctic expedition. The specimen so figured was obtained at lat. 33° 23' S., long. 7° 40' E.



## FAMILY PHRONIMIDÆ.

1852. *Phronimidæ*, Dana, Amer. Journ. Sci. and Arts, Ser. 2, vol. xiv., p. 315.  
1888. *P.*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1342.

## GEN. PHRONIMA, Latreille.

1802. *Phronima*, Latreille, Hist. Nat. Crust. et. Ins., vol. iii., p. 38.  
1888. *P.*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1346.

## \* PHRONIMA SEDENTARIA (Forskål).

1775. *Cancer sedentarius*, Forskål, Descrip. Anim. in itin. orient., p. 95.  
1888. *Phronima sedentaria*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1357, pl. 162B.  
1910. *P. s.*, Stebbing, S.A. Crustacea, pt. 5.

No. 100, a fine specimen, with its completely transparent house and a great quantity of tiny young ones, was sent by Dr. Gilchrist, from a reputed depth of 285 m., Lion's Head SE.  $\frac{1}{2}$  E., distant 42 miles. It is of course probable that it was taken by the shrimp trawl at the surface.

## FAMILY HYPERIIDÆ.

1852. *Hyperidæ*, Dana, Amer. Journ. Sci. and Arts, Ser. 2, vol. xiv., p. 314.  
1889. *Hyperiidæ*, Bovallius, K. Svenska Vet. Ak. Handl., vol. xxii., No. 7, p. 74.  
1907. *H.*, A. O. Walker, Amphipoda, Nat. Antarctic Exp., vol. iii., pp. 2, 7.

## GEN. HYPERIA, Latreille.

1823. *Hyperia*, Latreille, in Desmarest, Diet. Sci. Nat., vol. xxviii., p. 347.  
1889. *H.*, Bovallius, K. Svenska Vet. Ak. Handl., vol. xxii., No. 7, p. 129.

## HYPERIA PROMONTORII, Stebbing.

1888. *Hyperia promontorii*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1385, pl. 166B.

Off the Cape of Good Hope, lat.  $34^{\circ} 41'$  S., long.  $18^{\circ} 36'$  E.

1889. *H. p.*, Bovallius, K. Svenska Vet. Ak. Handl., vol. xxii., No. 7, p. 214, pl. 11, figs 3-13.

At various localities between lat.  $32^{\circ}$  and  $40^{\circ}$  S., and long.  $4^{\circ}$  and  $20^{\circ}$  E.

1901. *H. p.*, Vosseler, Amphip. Plankton Exp., pt. 1, p. 64.

#### GEN HYPEROCHE, Bovallius.

1887. *Hyperoche*, Bovallius, Bihang till K. Svenska Vet. Ak. Handl., vol. xi., No. 16, p. 18.

1907. *H.*, A. O. Walker, Amphipoda, Nat. Antarctic Exp., vol. iii., p. 8.

#### HYPEROCHE CRYPTODACTYLUS, Stebbing.

1888. *Hyperoche cryptodactylus*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1399, pl. 170.

Off the Cape of Good Hope, lat.  $34^{\circ} 41'$  S., long.  $18^{\circ} 36'$  E.

1889. *H. c.*, Bovallius, K. Svenska Vet. Ak. Handl., vol. xxii., No. 7, p. 105.

#### GEN. PARATHEMISTO, Boeck.

1871. *Parathemisto*, Boeck, Vid. Selsk. Forh. for 1870, p. 87 (7).

1889. *P.*, Bovallius, K. Svenska Vet. Ak. Handl., vol. xxii., No. 7, p. 248.

#### PARATHEMISTO TRIGONA (Dana).

1853. *Hyperia trigona*, Dana, U.S. Expl. Exp., vol. xiii., p. 987, pl. 67, figs. 12 *a-i, k*.

"Probably from the Lagulhas Bank, near Cape Horn." In including this species in the South African fauna I am taking it for granted that Dana wrote Cape Horn only by a slip of the pen for Cape of Good Hope.

1889. *Parathemisto t.*, Bovallius, K. Svenska Vet. Ak. Handl., vol. xxii., No. 7, pp. 249, 264.

#### FAMILY PHROSINIDÆ.

1852. *Phrosininæ* (sub-fam.), Dana, Amer. J. Sci. and Arts, vol. xiv., p. 315.

1887. *Anchylomeridæ*, Bovallius, Bihang till K. Sv. Vet. Ak. Handl., vol. xi., No. 16, p. 26.

1888. *Phrosinidæ*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1423.

GEN. PHROSINA, Risso.

1822. *Phrosina*, Risso, J. de Phys. Chim. Hist. Nat., vol. xcv., p. 244.  
1889. *P.*, Bovallius, K. Svenska Vet. Ak. Handl., vol. xxii., No. 7, p. 421.

PHROSINA SEMILUNATA, Risso.

- 1822 *Phrosina semilunata*, Risso, J. de Phys. Chim. Hist. Nat., vol. xcv., p. 245.  
1862. *P. s.*, Bate, Catal. Amph. Brit. Mus., p. 319, pl. 51, fig. 5.  
"Cape of Good Hope (*Paris Collection*)."  
1862. *P. nicetensis*, Bate, Catal. Amph. Brit. Mus., p. 320, pl. 51, fig. 6.  
"Cape of Good Hope (*specimen in the Paris Collection*)."  
Bate recognises the probability that this may be merely a variety of *P. semilunata*.  
1888. *P. s.*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1425, pl. 176.

FAMILY PLATYSCELIDÆ.

1852. *Typhinæ* (sub-fam.), Dana, Amer. J. Sci. and Arts, vol. xiv., p. 316.  
Since the generic name *Typhis* has proved to be preoccupied, Dana's Typhidæ and Typhinæ cannot be upheld.  
1862. *Platyscelidæ* (part), Bate, Catal. Amph. Brit. Mus., p. 326.  
1879. *Typhidæ*, Claus, Zool. Inst. Univ. Wien, vol. ii., p. 149 (3).  
1887. *Typhidæ*, Claus, Die Platysceliden, p. 30.  
1887. *Eutyphidæ*, Bovallius, Bihang till K. Sv. Vet. Ak. Handl., vol. xi., No. 16, p. 45.  
1888. *Typhidæ*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1461.  
1910. *Platyscelidæ*, Stebbing, Thetis Exp. N.S. Wales, Mem. iv., pt. 5, p. 456.

GEN. HEMITYPHIS, Claus.

1879. *Hemityphis*, Claus, Zool. Inst. Univ. Wien, vol. ii., pp. 150 (4), 158 (12).  
1887. *Dithyrus*, Bovallius, Bihang till K. Sv. Vet. Ak. Handl. vol. xi., No. 16, p. 46.

1888. *Hemityphis*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1471.

HEMITYPHIS TENUIMANUS, Claus.

1879. *Hemityphis tenuimanus*, Claus, Zool. Inst. Univ. Wien., vol. ii., p. 158 (12).  
From the Cape of Good Hope.  
1887. *H. t.*, Claus, Die Platysceliden, p. 38, pl. 4, figs. 1-13.  
1888. *H. t.*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1472, pl. 183.  
1900. *H. t.*, Chevreux, Camp. Sci. Monaco, fasc. xvi., p. 149.

GEN. PARATYPHIS, Claus.

1879. *Paratyphis*, Claus, Zool. Inst. Univ. Wien, vol. ii., pp. 150 (4), 159 (13).  
1887. *Paratyphes*, Bovallius, Bihang till K. Sv. Vet. Ak. Handl., vol. xi., No. 16, p. 47.  
1888. *Paratyphis*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1476.

PARATYPHIS MACULATUS, Claus.

1879. *Paratyphis maculatus*, Claus, Zool. Inst. Univ. Wien, vol. ii., p. 160 (14).  
From the Cape.  
1887. *P. m.*, Claus, Die Platysceliden, p. 39, pl. 5, figs. 1-9.

PARATYPHIS PROMONTORII, Stebbing.

1888. *Paratyphis promontorii*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1476, pl. 209D.  
One specimen, male, obtained off the Cape of Good Hope, lat. 35° 4' S., long. 18° 37' E.

GEN. TETRATHYRUS, Claus.

1879. *Tetrathyrus*, Claus, Zool. Inst. Univ. Wien, vol. ii., pp. 150 (4), 160 (14).

TETRATHYRUS FORCIPATUS, Claus.

1879. *Tetrathyrus forcipatus*, Claus, Zool. Inst. Univ. Wien, vol. ii., p. 160 (14).  
From the Cape.



1887. *T. f.*, Claus, Die Platysceliden, p. 40, pl. 5, figs. 10-18, pl. 6, figs. 1-3.  
 1888. *T. f.*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1484.  
 1900. *T. f.*, Chevreux, Camp. Sci. Monaco, fasc. xvi., p. 150.

### FAMILY PRONOIDÆ.

1879. *Pronoidæ*, Claus, Zool. Inst. Univ. Wien, vol. ii., pp. 149 (3), 168 (22).  
 1888. *P.*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1506.

#### GEN. AMPHIPRONOË, Bate.

1862. *Amphipronoë*, Bate, Catal. Amph. Brit. Mus., p. 335.  
 On the difficulties connected with this genus see Challenger Amphipoda, p. 337.

#### AMPHIPRONOË CUSPIDATA, Bate.

1862. *Amphipronoë cuspidata*, Bate, Catal. Amph. Brit. Mus., p. 336, pl. 53, fig. 5  
 "In the sea near the Cape of Good Hope (taken by Captain Raynaud in Feb. 1829)."

### FAMILY LYCÆIDÆ.

1879. *Lycæidæ*, Claus, Zool. Inst. Univ. Wien, vol. ii., p. 149 (3), 177 (31).  
 1887. *L.*, Claus, Die Platysceliden, p. 55.  
 1903. *L.*, A. Senna, Ann. Mus. Zool. Univ. Napoli, vol. i., No. 6, p. 5.

Dr. Senna points out that *Orio zancleus*, Cocco, is the earliest species assignable to the genus *Brachyscelus*, Bate. *Orio* as a generic name was preoccupied by Cocco himself and falls as a synonym to the earlier *Oxycephalus*. It does not seem certain what species is represented by Cocco's *zancleus*.

#### GEN. BRACHYSCELUS, Bate.

1861. *Brachyscelus*, Bate, Ann. Nat. Hist., Ser. 3, vol. viii., p. 7.  
 1888. *B.*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1543.

## BRACHYSCELUS RAPAX, Claus.

1871. *Schneehagenia rapax*, Claus, Nachrichten K. Gesellschaft Wiss. Göttingen, p. 157.  
 1879. *Thamyris r.*, Claus, Zool. Inst. Univ. Wien, vol. ii., p. 182 (36).  
 From the Cape.  
 1887. *T. r.*, Claus, Die Platysceliden, p. 59, pl. 17, figs. 1-8.  
 1888. *Brachyscelus r.*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., pp. 1553, 1555.

## FAMILY OXYCEPHALIDÆ.

1862. *Oxycephalidæ* (part), Bate, Catal. Amph. Brit. Mus., p. 341.  
 1888. *O.*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1575.  
 1890. *O.*, Bovallius, R. Soc. Sci. Upsal., Ser. 3, vol. xiv., p. 19.  
 1902. *O.*, Senna, Bull. Soc. Entom. Ital., vol. xxxiv., trim. 1, p. 3.

## OXYCEPHALUS TUBERCULATUS, Bate.

1862. *Oxycephalus tuberculatus*, Bate, Catal. Amph. Brit. Mus., p. 343, pl. 54, fig. 5.

Bate gives "*Hab.* Cape of Good Hope (*M. Raynaud*)," adding that "the label on the bottle in which the animal has been preserved is not distinct, except that it was taken by 'M. Raynaud, Cap<sup>e</sup> de la Chevette, Cap Fabrè, Janvier 1829'; but as the label attached to *Amphipronoë cuspidata* corresponds with this, I assume that the animals were found about the same time, since they were taken at nearly the same place."

1887. *O. piscator*, Claus, Die Platysceliden, p. 69.  
 1890. *O. tuberculatus*, Bovallius, R. Soc. Sci. Upsal., Ser. 3, vol. xiv., p. 62, pl. 2, figs. 2, 3.

## GEN. CALAMORHYNCHUS, Streets.

1878. *Calamorrhynchus*, Streets, Pr. Ac. Sci. Philad., p. 285.  
 1888. *C.*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1599.  
 1890. *C.*, Bovallius, R. Soc. Sci. Upsal., Ser. 3, vol. xiv., p. 72.

## CALAMORHYNCHUS RIGIDUS, Stebbing.

1888. *Calamorrhynchus rigidus*, Stebbing, Challenger Amphipoda, Reports, vol. xxix., p. 1600, pl. 206.

From South Atlantic, lat. 37° 45' S., long. 33° 0' W., and a juvenile specimen, "probably belonging to this species, was taken in Simon's Bay, Cape of Good Hope."

1890. *C. r.*, Bovallius, R. Soc. Sci. Upsal., Ser. 3, vol. xiv., p. 74.

## ENTOMOSTRACA.

### BRANCHIOPODA.

1867. *Branchiopoda*, Sars, Crust. d'eau douce de Norvège, pp. 5, 6.

1896. *B.*, Sars, Fauna Norvegiæ, vol. i., p. 2.

In the former treatise Sars included the Leptostraca under this order, making them a subdivision of the Phyllopoda, with the designation Rhynchostraca. In the later treatise under the title Phyllocarida he gave them rank beside the Phyllopoda.

### PHYLLOPODA.

1802. "*Phyllopodes*," Latreille, Hist. Nat. Crust. et Insectes, vol. iv., p. 130.

1825. *Phyllopoda*, Desmarest, Consid. gén. Crust., p. 358.

1831. *P.*, Latreille, Cours d'Entomologie, p. 432.

1867. *P.*, Sars, Crust. d'eau douce de Norvège, p. 5.

1896. *P.*, Sars, Fauna Norvegiæ, vol. i., p. 35.

In these and other writings Sars names three sections Anostraca, Notostraca, and Conchostraca—very suitable names in themselves, but open to the objection that the terminations have been applied to the higher divisions of the Class Crustacea, such as the Malacostraca.

1902. *P.*, Stebbing, Encycl. Britannica, ed. 10, vol. xxviii. (Suppl. vol. iv.), p. 269, art. Entomostraca.

Here the names Gymnophylla, Notophylla, and Conchophylla are substituted for the three sections distinguished by Sars, with meanings equivalent to those of the discarded terms.

### TRIBE GYMNOPHYLLA.

1867. *Anostraca*, Sars, Crust. d'eau douce de Norvège, pp. 5, 6.

1896. *A.*, Sars, Fauna Norvegiæ, vol. i., p. 39.

1902. *Gymnophylla*, Stebbing, Encycl. Brit., Ed. 10, vol. xxviii. (Suppl. vol. iv.), p. 269.

## FAMILY BRANCHIPODIDÆ.

1896. *Branchipodidæ*, Sars, Fauna Norvegiæ, vol. i., p. 40.

In this treatise Sars allots to this family five genera, *Branchipus*, Schaeffer, *Chirocephalus*, Prevost, *Artemia*, Leach, *Streptocephalus*, Baird, *Branchinecta*, Verrill, to which he has himself later added *Branchipodopsis*.

## GEN. STREPTOCEPHALUS, Baird.

1854. *Streptocephalus*, Baird, Ann. Nat. Hist., Ser. 2, vol. xiv., p. 219.  
 1883. S., Packard, U.S. Geol. Survey, Phyllopoda, p. 344.  
 1898. S., Sars, Arch. Naturv. Kristian., vol. xx., p. 17.

## STREPTOCEPHALUS CAFER (Lovén).

1846. *Branchipus cafer*, Lovén, K. Vet. Ak. Handlingar för År 1845, p. 433, pl. 5.  
 "Taken in Natal, lat.  $26\frac{1}{2}^{\circ}$  S., long. 29 E., by Herr J. Wahlberg, in some pools with clear water near the public road from Port Natal to the salt-pan of Makkalis mountain between Crocodile and Ap Rivers."  
 1898. *Streptocephalus caffer*, Sars, Arch. Naturv. Kristian., vol. xx., No. 4, p. 18, and No. 6, p. 5.

In his discussion of *S. gracilis*, Sars remarks: "At first I thought that this form might be the *Branchipus caffer* of Lovén, which likewise is from South Africa, and which undoubtedly belongs to the genus *Streptocephalus*; but the very short diagnosis given by Lovén does not suffice for a reliable specific determination, and indeed, the notes subsequently given by Brauer (Sitzungsber. d. K. Akad. d. Wiss. in Wien, 1877) on an examination of some authentic specimens of this form preserved in the Zoological Museum of Berlin, show that Lovén's species is different from the one here described. It would seem to be more nearly allied to the *Branchipus rubricaudatus* of Klunzinger (Zeitschrift f. wiss. Zool., xvii., 1866), from the northern part of Africa, though differing also from this species in several points." It is only fair to Lovén to notice that his account of the species, though it may be inadequate, occupies two pages and a half, accompanied by a full plate of details.



## STREPTOCEPHALUS GRACILIS, Sars.

1898. *Streptocephalus gracilis*, Sars, Arch. Naturv. Kristian, vol. xx., No. 4, p. 17, pl. 2.

Raised by Sars from dried mud supplied to him by Mr. J. V. Hodgson, whose brother had taken it "from a shallow lake (vlei) in the neighbourhood of Port Elizabeth, Cape Colony."

## \* STREPTOCEPHALUS PURCELLI, Sars.

1898. *Streptocephalus purcelli*, Sars, Arch. Naturv. Kristian., vol. xx., No. 6, p. 4, pl. 1.

From a pond on the Green Common, near Cape Town, and sent to Sars by the South African Museum.

1899. *S. p.*, Sars, Arch. Naturv. Kristian., vol. xxi., No. 4, p. 18, pl. 2, figs. 3-5.

A male specimen sent to Sars by Dr. Purcell, who obtained it from the pond on Green Common.

## STREPTOCEPHALUS DREGEI, Sars.

1899. *Streptocephalus dregei*, Sars, Arch. Naturv. Kristian., vol. xxi., No. 4, p. 19, pl. 2, figs. 6-10.

Two male specimens, taken by Mr. J. L. Drege at Port Elizabeth.

1904. *S. d.*, Gurney, Proc. Zool. Soc., p. 298, pl. 18, figs. 1, 2.

Collected by Major Eckersley at Kroonstad.

## \* STREPTOCEPHALUS PAPILLATUS, Sars.

1905. *Streptocephalus papillatus*, Sars, Arch. Naturv. Kristian., vol. xxvii., No. 4, p. 4, pl. 1.

Sent to Professor Sars by Dr. F. Purcell, "from a small pond in the barren regions of Cape Colony, at Hanover."

## GEN. BRANCHIPODOPSIS, Sars.

1898. *Branchipodopsis*, Sars, Arch. Naturv. Kristian., vol. xx., No. 4, p. 26.

Sars considers that *Branchipus abiadi*, Brauer, should undoubtedly be transferred to this genus.

## BRANCHIPODOPSIS HODGSONI, Sars.

1898. *Branchipodopsis hodgsoni*, Sars, Arch. Naturv. Kristian., vol. xx., No. 4, p. 26, pl. 3.

Raised from dried mud as explained under *Streptocephalus*

*gracilis*, from vleis, near Port Elizabeth, Cape Colony, and dedicated "to the distinguished zoologist Mr. J. V. Hodgson," to whom the Norwegian professor was indebted for the opportunity of rearing it.

### TRIBE NOTOPHYLLA.

1867. *Notostraca*, Sars, Crust. d'eau douce, pp. 5, 6.  
 1896. *N.*, Sars, Fauna Norvegiæ, vol. i., p. 66.  
 1902. *Notophylla*, Stebbing, Encycl. Brit., ed. 10, vol. xxviii. (Suppl. vol. iv.), p. 269.

### FAMILY APODIDÆ.

1834. *Apodidæ*, Burmeister, Organization of Trilobites.  
 1850. *A.*, Baird, British Entomostraca, Ray Soc., p. 18.  
 1892. *A.*, H. M. Bernard, A Morphological Study, Nature Series.  
 1896. *A.*, Sars, Fauna Norvegiæ, vol. i., p. 67.

### GEN. APUS, Schaeffer.

1756. *Apus*, Schaeffer, Mon. d. krebsartige Kiefenfüsse, p. 131.

Owing to its date, Schaeffer's work is not accepted by Sherborn in his Index Animalium as authorising the use of this generic term under the rules for Linnean nomenclature. But Professor F. Jeffrey Bell, Ann. Nat. Hist., Ser. 7, vol. v., May, 1900, argues "that Schäfer's generic name stands on an equality with those of Brisson or Artedi, which are expressly named in the note to law 2 of the British Association rules." The point is that binomial designations may be accepted from authors who had the sagacity to be binomialists even before the Epoch 1758. Should this ruling not be allowed on Schaeffer's behalf, it seems that *Apos*, Scopoli, Introd. Hist. Nat., p. 404, 1777, will have to be substituted for the crustacean genus, while *Apus* is given up to the birds.

1850. *A.*, Baird, British Entomostraca, Ray Soc., p. 29.  
 1883. *A.*, Packard, U.S. Geol. Survey, Phyllopoda, p. 319.  
 1896. *A.*, Sars, Fauna Norvegiæ, vol. i., p. 67.

### \* APUS NUMIDICUS, Grube.

1865. *Apus numidicus*, Grube, Arch. Naturg., vol. xxxi., p. 278 (75), pl. 11, fig. 14 a, b.

1877. *A. dispar*, Brauer, Sitzungsab. K. Ak. Wiss. Wien, vol. lxxv., pt. 1, p. 589, pl. 1.
1898. *A. numidicus*, Sars, Arch. Naturv. Kristian., vol. xx., No. 4, p. 5, pl. 1.  
Raised from the dried mud of the previously mentioned vlei near Port Elizabeth.
1899. *A. n.*, Sars, Arch. Naturv. Kristian., vol. xxi., No. 4, p. 6.  
Males and females, sent to Sars by Dr. Purcell, having been collected by Mr. J. L. Drege at Port Elizabeth.
1905. *A. n.*, Sars, Arch. Naturv. Kristian., vol. xxvii., No. 4, p. 3.  
Two fine male specimens, sent by Dr. Purcell, from a small pond, at Hanover.

\* *APUS NAMAQUENSIS*, Sars.

1899. *Apus namaquensis*, Sars, Arch. Naturv. Kristian., vol. xxi., No. 4, p. 6, pl. 1, figs. 1-8.  
"Taken by Mr. W. Sculley from some pond or vley in the Namaqualand," and forwarded to Sars by Dr. Purcell.

\* *APUS SCULLEYI*, Sars.

1899. *Apus sculleyi*, Sars, Arch. Naturv. Kristian., vol. xxi., No. 4, p. 12, pl. 1, figs. 9-13.  
One female specimen, taken by Mr. W. Sculley with the preceding species in the Namaqualand.

\* *APUS TRACHYASPIS*, Sars.

1899. *Apus trachyaspis*, Sars, Arch. Naturv. Kristian., vol. xxi., No. 4, p. 15, pl. 2, figs. 1, 2.  
One female specimen, taken by Mr. J. L. Drege at Port Elizabeth together with *A. numidicus*, and sent to Sars for examination by Dr. Purcell, who called his attention to the peculiar scabrous surface of the carapace, and informed him that a male specimen with similar sculpturing was taken together with the female.

TRIBE CONCHOPHYLLA.

1867. *Conchostraca*, Sars, Crust. d'eau douce, pp. 5, 6.
1896. *C.*, Sars, Fauna Norvegiæ, vol. i., p. 83.
1902. *Conchophylla*, Stebbing, Encycl. Brit., ed. 10, vol. xxviii. (Suppl. vol. iv.), p. 270.

## FAMILY LYNCEIDÆ.

1896. *Limnetidæ*, Sars, Fauna Norvegiæ, vol. i., p. 116.  
 1902. *Lynceidæ*, Stebbing, The Zoologist, p. 101.  
 1902. *L.*, Stebbing, Encycl. Brit., ed. 10, vol. xxviii. (Suppl. vol. iv.), p. 270.

## GEN. LYNCEUS, O. F. Müller.

1776. *Lynceus* (part), O. F. Müller, Zool. Dan. Prodr., pp. xxvii, 199.  
 1785. *L.* (part), O. F. Müller, Entomotraca Daniæ et Norvegiæ, pp. 34, 67.  
 1816. *L.*, Leach, Encyclopædia Britannica, ed. 5 Suppl., art. Annulosa, p. 406.  
 Leach here assigns to the genus only Müller's *L. brachyurus*, which thus becomes a standard for the restricted genus  
 1846. *Limnetis*, Lovén, K. Vet. Ak. Handlingar för År 1845, pp. 428, 430.  
 Since Lovén's genus covers *L. brachyurus*, it must itself become a synonym of the genus *Lynceus* as restricted by Leach.  
 1902. *Lynceus*, Stebbing, The Zoologist, p. 101.

## LYNCEUS WAHLBERGII (Lovén).

1846. *Limnetis wahlbergii*, Lovén, K. Vet. Ak. Handl. för År 1845, p. 430, pl. 4.  
 Taken by Wahlberg, along with *Streptocephalus cafer* above mentioned.  
 1904. *L. w.*, Gurney, Proc. Zool. Soc., p. 299.  
 Collected by Major Eckersley, at Kroonstad.

## FAMILY CYZICIDÆ.

1900. *Estheriidæ*, Sars, On some Indian Phyllopoda, p. 10.  
 Sars takes the family in a restricted sense, limiting it for the time to the two genera *Estheria*, Rüppell, and his own *Leptestheria*.  
 1902. *Leptestheriidæ*, Stebbing, Encycl. Brit., ed. 10, vol. xxviii. (Suppl. vol. iv.), p. 278.  
 As *Estheria* lapsed by preoccupation, and as *Leptestheria* comprised its typical species *E. dahalacensis*, it seemed appropriate to found the family name on *Leptestheria*.



But *Cyzicus*, Audouin, appears to be of earlier date than *Estheria*, and to have been recognised as synonymous with it, though for vagueness or some other reason usually discarded. At least provisionally, it is convenient to revive it for those species of *Estheria* which have not been transferred to other genera, and which would otherwise be in want of a valid generic name.

## CYZICUS, Audouin.

1837. "*Cyzicus*, Audouin, Ann. de la soc. entomologique, vi., 1837, Bulletin, p. x (Febr. 1837)."  
 1837. "*Estheria* Rueppel, Museum Senkenbergianum II, 119, (1837)."  
 1842. "*Isaura* Joly, Annales des sciences naturelles, seconde série, xvii, 293."  
 1846. *Cyzicus*, Lovén, K. Vet. Ak. Handlingar för År 1845, p. 428.

The first three references are borrowed from Lovén, who, in giving precedence to Audouin and mentioning that his paper dated from February, probably intended to emphasise the priority of *Cyzicus* over *Estheria*. *Isaura*, like *Estheria*, is preoccupied.

## CYZICUS AUSTRALIS, Lovén.

1846. *Cyzicus australis*, Lovén, K. Vet. Ak. Handl. för År 1845, p. 428, pl. 3.  
 Taken in Natal, as described under *Streptocephalus cafer*.

## \* CYZICUS ELIZABETHÆ (Sars).

1898. *Estheria elizabethæ*, Sars, Arch. Naturv. Kristian., vol. xx., No. 4, p. 33, pl. 4.  
 Bred out of the dried mud from the before-mentioned vlei in the neighbourhood of Port Elizabeth, Cape Colony.  
 1904. *E. e.*, Gurney, Proc. Zool. Soc., p. 299.  
 Collected by Major Eekersley, at Kroonstad.  
 1905. *E. e.*, Sars, Arch. Naturv. Kristian., vol. xxvii., No. 4, p. 3.  
 Sent to Sars by Dr. Purcell, from a small pond in the barren regions of Cape Colony, at Hanover.

## \* CYZICUS OBLIQUUS (Sars).

1905. *Estheria obliqua*, Sars, Arch. Naturv. Kristian., vol. xxvii., No. 4, pp. 3, 10, pl. 2.

From the pond at Hanover. Sars expresses a doubt as to its identity with the species *Estheria lofti*, Baird, recorded from Bagdad. Also he found it to be in some respects very similar outwardly to certain species of the genus *Leptestheria*, but concludes by saying: "It is, however, a true *Estheria*, as is proved by the structure of the enclosed animal."

GEN. LEPTESTHERIA, Sars.

1898. *Leptestheria*, Sars, Arch. Naturv. Kristian., vol. xx., No. 6, p. 9.

1900. *L.*, Sars, On some Indian Phyllopoda, p. 10.

\* LEPTESTHERIA MACGILLIVRAYI (Baird).

1898. *Leptestheria siliqua*, Sars, Arch. Naturv. Kristian., vol. xx., No. 6, p. 11, pls. 2, 3.

Males and females, from a pool on Green Point Common, near Cape Town, were sent to Sars by the South African Museum. Sars says on this occasion: "At first I was of the opinion that this form might be the *Estheria Macgillivrayi* of Baird, which was procured from the very same region; but a closer comparison of the figures of the shell he gives, seems to forbid such an identification."

1899. *L. s.*, Sars, Arch. Naturv. Kristian., vol. xxi., No. 4, p. 23, pl. 3.

Raised from dried mud sent to Sars by Dr. Purcell; also specimens received from the same gentleman, taken by him at Green Point Common; others collected by Mr. J. L. Drege at Port Elizabeth, and a somewhat anomalous adult male, "taken by Mr. Sculley in the Bushmanland, accordingly in a rather remote region of South Africa." With this more abundant material available, Sars infers that beyond doubt "the 2 forms recorded by Baird as *Estheria Macgillivrayi* and *E. Rubidgei* must be adduced to the same species."

1900. *L. siliqua*, Sars, On some Indian Phyllopoda, p. 11.

Sars here again notes that Baird's two species are congeneric with his *Leptestheria siliqua*, and that "in all probability they are identical with *L. siliqua*." But in that case Baird's specific name should be adopted.

1905. *L. siliqua*, Sars, Arch. Naturv. Kristian., vol. xxvii., No. 4, p. 3.

A single male specimen, taken at Hanover, with four other phyllopods.

## CLADOCERA.

1829. *Cladocera*, Latreille, Le Règne Animal, vol. iv., p. 151.  
 1865. *C.*, Sars, Norges Ferskvandskrebssdyr, pt. 1, table to p. 21.  
 1895. *C.*, Richard, Ann. Sci. Nat., Ser. 7, vol. xviii., p. 279.  
 1896. *C.*, Richard, Ann. Sci. Nat., Ser. 8, vol. ii., p. 187.  
 1900. *C.*, Lilljeborg, Cladocera Sueciæ, Nova Acta R. S. Upsal, Ser. 3, vol. xix.

## DIVISION CALYPTOMERA.

## TRIBE ANOMOPODA.

## FAMILY DAPHNIIDÆ.

1820. *Daphnides*, Straus, Mém. Mus. d'Hist. Nat., vol. vi., p. 155.  
 1900. *Daphnidæ*, Lilljeborg, Cladocera Sueciæ, pp. 13, 64.

## GEN. DAPHNIA, O. F. Müller.

1785. *Daphnia*, O. F. Müller, Entomotraca Daniæ et Norvegiæ, pp. 34, 79.  
 1900. *D.*, Lilljeborg, Cladocera Sueciæ, p. 68.

## DAPHNIA THOMSONI, Sars.

1884. *Daphnia similis*, Thomson, Tr. New Zealand Inst., vol. xvi., p. 240, pl. 13, figs. 6-9.  
 1894. *D. thomsoni*, Sars, Vid. Selsk. Skr., No. 5, p. 5, pl. 1.

Sars changes the name given by Thomson on the ground of its preoccupation by Claus for a species taken near Jerusalem.

1895. *D. t.*, Sars, Vid. Selsk. Skr., No. 8, p. 4.

Raised from "dried mud taken by Mr. Thesen from a swamp at *Knysna*, which is located some distance east of the Cape of Good Hope."

1896. *D. similis*, Claus, var. *thomsoni*, Richard, Ann. Sci. Nat., Ser. 8, vol. ii., p. 217, pl. 25, figs. 13, 14.

Dr. Jules Richard, while commenting on the remarkably extensive distribution of *D. similis*, Claus, prefers to consider Thomson's like-named species as simply a variety of the species earlier established by Claus.

## DAPHNIA DOLICHOCEPHALA, Sars.

1895. *Daphnia dolichocephala*, Sars, Vid. Selsk. Skr., No. 8, p. 4, pl. 1.

From the swamp at Knysna just mentioned; hatched by Sars in two successive seasons abundantly, in the latter "after the bottom-residue had been kept in a dried state during the winter."

## DAPHNIA PROPINQA, Sars.

1895. *Daphnia propinqua*, Sars, Vid. Selsk. Skr., No. 8, p. 9, pl. 2, figs. 1-8.

From the Knysna mud; it "continued to live and propagate during the whole summer, at last filling the aquarium with myriads of individuals."

## GEN. CERIODAPHNIA, Dana.

1853. *Ceriodaphnia*, Dana, U.S. Expl. Exp., vol. xiii., p. 1273.  
 1896. *C.*, Richard, Ann. Sci. Nat., Ser. 8, vol. ii., p. 188.  
 1900. *C.*, Lilljeborg, Cladocera Sueciæ, pp. 66, 183.

## CERIODAPHNIA RIGAUDI, Richard.

1894. *Ceriodaphnia rigaudi*, Richard, Mém. Soc. Zool. France, vol. vii., p. 239.  
 1895. *C. r.*, Sars, Vid. Selsk. Skr., No. 8, p. 12, pl. 2, figs. 9-15.  
 From the Knysna mud, "successfully domesticated during several succeeding seasons, increasing in number with each season."  
 1903. *C. r.*, Sars, Arch. Naturv. Kristian., vol. xxv., No. 8, p. 10.

## CERIODAPHNIA NATALIS, Brady.

1907. *Ceriodaphnia natalis*, Brady, Annals Natal Government Mus., vol. i., pt. 2, p. 180, pl. 32, figs. 3-7.  
 Netted at Richmond, Natal, by Mr. James Gibson.

## GEN. SIMOSA, Norman.

1855. *Simocephalus* (preocc.), Schoedler, Jahresb. über die Louisenstädt. Realschule, p. 17.  
 1900. *S.*, Lilljeborg, Cladocera Sueciæ, pp. 66, 164.  
 1903. *Simosa*, Norman, Ann. Nat. Hist., Ser. 7, vol. xi., p. 367.



## SIMOSA AUSTRALIENSIS (Dana).

1853. *Daphnia australiensis*, Dana, U.S. Expl. Exp., vol. xiii., p. 1271, pl. 89, fig. 4 *a-c*.  
 1888. *Simocephalus a.*, Sars, Vid. Selsk. Forh. Christian., p. 15, pl. 2, figs. 1-5.  
 1895. *S. a.*, Sars, Vid. Selsk. Skr., No. 8, p. 15.  
 From the Knysna mud.

## SIMOSA CAPENSIS (Sars).

1895. *Simocephalus capensis*, Sars, Vid. Selsk. Skr., No. 8, p. 15, pl. 3.  
 From the Knysna mud. The aquaria swarmed at last with individuals in different stages of development, and "contrary to what is generally the case, male specimens occurred at the close of the season in innumerable shoals."  
 1907. *S. c.* (?), Brady, Annals Natal Government Mus., vol. i., pt. 2, p. 179, pl. 32, fig. 8.  
 Collected by Mr. James Gibson, at Richmond, Natal.

## \* SIMOSA EXSPINOSA (de Geer).

1778. *Monoculus exspinosus* ?, de Geer, Mém. Hist. Insectes, vol. vii., p. 457, pl. 27, figs. 9-13, pl. 28, figs. 1, 2.  
 1841. *Daphnia exspinosa*, Koch, Deutschlands Crust. Myr. Arachn., pt. 35, pl. 11.  
 1900. *Simocephalus exspinosus*, Lilljeborg, Cladocera Sueciæ, p. 173, pl. 25, figs. 8-18, pl. 26, figs. 1-8.  
 The preceding references are borrowed from Lilljeborg.  
 1903. *S. e.*, Sars, Entom. from China and Sumatra, Arch. Naturv. Kristian., vol. xxv., No. 8, p. 8.  
 "Cape of Good Hope (collection of Dr. Purcell)."

## GEN. SCAPHOLEBERIS, Schoedler.

1858. *Scapholeberis*, Schoedler, Jahresb. über die Louisenstädt. Realschule, p. 23.  
 1900. *S.*, Lilljeborg, Cladocera Sueciæ, pp. 66, 150.

## \* SCAPHOLEBERIS KINGI, Sars.

1903. *Scapholeberis kingi*, Sars, Entom. from China and Sumatra, Arch. Naturv. Kristian., vol. xxv., No. 8, p. 8, pl. 1, figs. 2 *a-c*.  
 "Cape of Good Hope (coll. of Dr. Purcell)."

## GEN. MOINA, Baird.

1850. *Moina*, Baird, British Entomotraca, Ray Soc., p. 100.

1900. *M.*, Lilljeborg, Cladocera Sueciæ, pp. 66, 214.

## MOINA BELLI, Gurney.

1904. *Moina belli*, Gurney, Proc. Zool. Soc., p. 299, pl. 18, figs. 3, 4.

Collected by Major Eckersley, at Kroonstad.

## FAMILY MACROTRICHIDÆ.

1865. *Lyncodaphnidæ*, Sars, Norges Ferskvandskrebsdyr, pt. 1, p. 20.

1867. *Macrothricidæ*, Norman and Brady, Nat. Hist. Tr. Northumb. and Durham, vol. i., pt. 3, p. 360.

1900. *Lyncodaphnidæ*, Lilljeborg, Cladocera Sueciæ, p. 308.

1901. *Macrothricidæ*, Sars, Entom. S. Amer., Arch. Naturv. Kristian., vol. xxiii., p. 27.

1902. *Macrotrichidæ*, Stebbing, Encycl. Brit., ed. 10, vol. xxviii. (Suppl. vol. iv.), p. 270.

## GEN. MACROTHRIX, Baird.

1843. *Macrothrix*, Baird, Ann. Nat. Hist., vol. xi., p. 87.

1900. *M.*, Lilljeborg, Cladocera Sueciæ, pp. 310, 337.

## MACROTHRIX AFFINIS, Brady.

1904. *Macrothrix affinis*, Brady, Proc. Zool. Soc. London, vol. i., p. 127, pl. 8, figs. 63-65.

Akin to *M. laticornis* (Jurine). Collected by Mr. James Gibson, Resident Magistrate at Greytown, Natal, from pool in that neighbourhood.

## FAMILY CHYDORIDÆ.

1845. *Lynceidæ*, Baird, Trans. Berw. Nat. Club, vol. ii., p. 150.

1900. *L.*, Lilljeborg, Cladocera Sueciæ, p. 381.

1902. *Chydoridæ*, Stebbing, The Zoologist, p. 105.

1903. *C.*, Sars, Entomotraca from China and Sumatra, Arch. Naturv. Kristian., vol. xxv., No. 8, p. 13.

As already explained, the position of the genus *Lynceus* and a family Lynceidæ in the Phyllopoda makes it impossible to retain the name Lynceidæ among the Cladocera.

## GEN. CHYDORUS, Leach.

1816. *Chydorus*, Leach, Encycl. Brit., ed. 5, Suppl., p. 406, art. Annulosa.  
1900. *C.*, Lilljeborg, Cladocera Sueciæ, pp. 400, 545.

## CHYDORUS BARROISI (Richard).

1894. *Pleuroxus barroisi*, Richard, Revue Biol. Nord France, vol. vi., p. 16.  
1895. *Chydorus b.*, Sars, Vid. Selsk. Skr., No. 8, p. 25, pl. 4, figs. 9-13.  
Bred from the mud of Knysna swamp.  
1901. *C. b.*, Sars, Entom. S. America, Arch. Naturv. Kristian., vol. xxiii., p. 67, pl. 11, fig. 1 *a-b*.

## CHYDORUS GIBSONI, Brady.

1907. *Chydorus gibsoni*, Brady, Annals Natal Gov. Mus., vol. i., pt. 2, p. 183, pl. 32, figs. 1, 2.  
Collected at Richmond, Natal, by Mr. James Gibson.

## GEN. LEYDIGIA, Kurz.

1874. *Leydigia*, Kurz, Sitzungsber. K. Ak. Wiss. Wien, vol. lxx., pt. 1, p. 51.  
1900. *L.*, Lilljeborg, Cladocera Sueciæ, pp. 400, 492.

## LEYDIGIA PROPINQA, Sars.

1895. *Leydigia acanthocercoides*, Sars (not Fischer), Vid. Selsk. Skr., No. 8, p. 18, pl. 4, figs. 1-4.  
Raised from the Knysna mud.  
1903. *L. propinqua*, Sars, Entom. China and Sumatra, Arch. Naturv. Kristian., vol. xxv., No. 8, p. 14, pl. 1, figs. 4, 4a.  
1904. *L. africana*, Gurney, Proc. Zool. Soc., p. 300, pl. 18, figs. 5-6.  
Collected by Major Eckersley from a water-hole on the veld at Kroonstad, O.R.C. According to Brady this species is a synonym of *L. propinqua*.  
1907. *L. propinqua*, Brady, Annals Natal Gov. Mus., vol. i., pt. 2, p. 181, pl. 31, figs. 12, 13.  
From Richmond, collected by Mr. Gibson.

## GEN. ALONOPSIS, Sars.

1862. *Alonopsis*, Sars, Vid. Selsk. Forhandl. Christian., for 1861, p. 41.  
1900. *A.*, Lilljeborg, Cladocera Sueciæ, pp. 400, 432.

## ALONOPSIS COLLETTI, Sars.

1895. *Alonopsis colletti*, Sars, Vid. Selsk. Skr., No. 8, p. 22, pl. 4, figs. 5-8.

Raised out of mud from the Knysna swamp, and dedicated to Professor R. Collett, the friend and colleague through whose intervention Sars obtained the material.

## GEN. ALONA, Baird.

1843. *Alona*, Baird, Ann. Nat. Hist., Ser. 1, vol. xi., p. 92.

## ALONA GLABRA, Sars.

1901. *Alona glabra*, Sars, Entom. S. Amer., Arch. Naturv. Kristian., vol. xxiii., p. 55, pl. 9, figs. 6, 6a.

1907. *A. g.*, Brady, Annals Natal Gov. Mus., vol. i., pt. 2, p. 180.  
In gatherings by Mr. Gibson, at Richmond, Natal.

## ALONA GUTTATA, Sars.

1862. *Alona guttata*, Sars, Vid. Selsk. Forhandl. for 1861, p. 39.

1901. *A. g.*, Sars, Entom. S. Amer., Arch. Naturv. Kristian., vol. xxiii., p. 51, pl. 9, figs. 3, 3a.

1907. *A. g.*, Sars, var. *parvula*, Kurz, Brady, Annals Natal Gov. Mus., vol. i., pt. 2, p. 181.

In gatherings by Mr. Gibson, at Richmond, Natal.

## GEN. ALONELLA, Sars.

1862. *Alonella*, Sars, Vid. Selsk. Forhandl. for 1861, p. 40.

## ALONELLA CLATHRATULA, Sars.

1896. *Alonella clathratula*, Sars, Entom. Sydney, Arch. Naturv. Kristian., p. 43, pl. 6, figs. 7, 8.

1907. *A. c.*, Brady, Annals Natal Gov. Mus., vol. i., pt. 2, p. 181.  
In gatherings by Mr. Gibson, at Richmond, Natal.

## GEN. PLEUROXUS, Baird.

1843. *Pleuroxus*, Baird, Ann. Nat. Hist., Ser. 1, vol. xi., p. 93.

1900. *P.*, Lilljeborg, Cladocera Sueciæ, pp. 400, 527.

## PLEUROXUS ASSIMILIS, Brady.

1907. *Pleuroxus assimilis*, Brady, Annals Natal Gov. Mus., vol. i., pt. 2, p. 182, pl. 32, figs. 9, 10.

In gatherings by Mr. Gibson, at Richmond, Natal.



## OSTRAPODA.

1802. *Ostrachoda* (part), Latreille, Hist. Nat. Crust. et Ins., vol. iii., p. 17.  
 1806. *Ostracoda* (part), Latreille, Genera Crust. et Ins., vol. i., p. 17.  
 1821. *Ostrapodes*, Straus, Mém. Mus. d'Hist. Nat., vol. vii., p. 58.  
 1825. *Ostrapoda*, Desmarest, Consid. gén. Crust., p. 380.  
 1829. *Ostracoda*, Latreille, Le Règne Animal, vol. iv., pp. 151, 158.  
 1831. *Ostrapoda*, Latreille, Cours d'Entomologie, p. 429.

In 1829 Latreille, describing the second division of his "branchiopodes lophyropes," says parenthetically, "nos OSTRACODES ou l'ordre des ostrapodes de M. Straus," a great injustice to Straus, persisted in to the present day. For even in 1825, Fam. Nat. du Règne Animal, p. 300, Latreille retained the Cladocera among his Ostracoda, and originally they comprised Phyllopoda as well, whereas the Ostrapoda of Straus, as Latreille in 1831 indirectly acknowledges, have no such confusion, and the termination of the name is in uniformity with that of the Branchiopoda and the Copepoda. Desmarest frankly adopted Ostrapoda, Straus. Lucas, in his Manual, 1840, uses the form "Ostrapodes, Latreille." The rest of us have been as sheep following their leader through a broken hedge.

1850. *Ostracoda*, Baird, British Entomostraca, Ray Soc., p. 138.

Other references may be derived from those given in the list of species.

## TRIBE PODOCOPA.

1894. *Podocopa*, G. W. Müller, F. und Fl. Neapel, vol. xxi., p. 239.

In this tribe Müller includes the Platycopa which Sars in 1865 separated from his tribe Podocopa.

## FAMILY CYPRIDIDÆ.

1894. *Cypridæ*, G. W. Müller, F. u. Fl. Neapel, vol. xxi., p. 239.

## GEN. CYPRIS, O. F. Müller.

1785. *Cypris*, O. F. Müller, Entomostraca, p. 48.  
 1889. *C.*, Brady and Norman, Tr. R. Dublin Soc., Ser. 2, vol. iv., p. 73.

## CYPRIS CORPULENTA, Sars.

1895. *Cypris corpulenta*, Sars, Vid. Selsk. Skr., No. 8, p. 30, pl. 5, fig. 2 a-c.

Raised from the mud of Knysna swamp.

1908. *C. c.*, G. W. Müller, Deutsche südpol. Exp., vol. x., p. 150, figs. 1-6.

From Plumstead, Zeekoe Vley, at Simonstown. Perhaps to be referred to *Eurycypris*, Müller, 1898.

## CYPRIS TRIGONA, Sars.

1895. *Cypris trigona*, Sars, Vid. Selsk. Skr., No. 8, p. 32, pl. 5, fig. 3 a-c.

Raised from the mud of Knysna swamp

## CYPRIS INERMIS, Brady.

1904. *Cypris inermis*, Brady, Proc. Zool. Soc. London, p. 125, pl. 8, figs. 44-49.

From pools near Greytown, Natal, collected by Mr. James Gibson.

## CYPRIS ARATRA, Brady.

1904. *Cypris aratra*, Brady, Proc. Zool. Soc., p. 125, pl. 7, figs. 34, 38.

From neighbourhood of Greytown, collected by Mr. Gibson.

## CYPRIS INTUMESCENS, Brady.

1907. *Cypris intumescens*, Brady, Annals Natal Gov. Mus., vol. i., pt. 2, p. 173, pl. 29, figs. 1-5.

One specimen, obtained by Mr. Gibson, from Somkele, Zululand.

## CYPRIS RADIATA, G. W. Müller.

1908. *Cypris radiata*, Müller, Deutsche südpol. Exp., vol. x., p. 146, figs. 1-8 in text.

From Plumstead, Zeekoe Vley at Simonstown; two unfertilised female specimens.

## CYPRIS SYNGRAMMA, G. W. Müller.

1908. *Cypris syngamma*, Müller, Deutsche südpol. Exp., vol. x., p. 148, pl. 19, figs. 3, 6 and figs. 1-6 in text.

Plumstead-Zeekoe Vley and Fishhoek at Simonstown; frequent.

CYPRIS TRICHOTA, G. W. Müller.

1908. *Cypris trichota*, Müller, Deutsche südpol. Exp., vol. x., p. 152, figs. 1-5 in text.  
Plumstead, Zeekoe Vley at Simonstown; rare.

CYPRIS CAPENSIS, G. W. Müller.

1908. *Cypris capensis*, Müller, Deutsche südpol. Exp., vol. x., p. 153, pl. 19, fig. 2, and figs. 1-6 in text.  
Plumstead-Zeekoe Vley at Simonstown; frequent. Müller regards this species, together with *C. corpulenta* and *C. trichota*, as a group near to his genus *Eurycypris*.

GEN. CYPRIA, Zencker.

1854. *Cypria*, Zencker, Arch. Naturg., vol. xx., p. 77.  
1889. *C.*, Brady and Norman, Trans. R. Dublin Soc., Ser. 2, vol. iv., p. 68.

CYPRIA CAPENSIS, Sars.

1895. *Cypria capensis*, Sars, Vid. Selsk. Skr., No. 8, p. 28, pl. 5, fig. 1 a-c.  
Bred out of mud from the Knysna swamp.

CYPRIA ARMATA, G. W. Müller.

1898. *Cypria armata*, Müller, Ostrac. in Voeltzkow's Madagaskar und Ost-Afrika, vol. xxi., p. 261, pl. 13, figs. 1-5, 12.  
1907. *C. a.*, Brady, Annals Natal Gov. Mus., vol. i., pt. 2, p. 174, pl. 29, figs. 6-11.  
Collected by Mr. James Gibson, at Pietermaritzburg.

CYPRIA CASTANEA, Brady.

1904. *Cypria castanea*, Brady, Proc. Zool. Soc., p. 125, pl. 7, figs. 40-42, pl. 8, fig. 43.  
Collected by Mr. Gibson, near Greytown, Natal. The species closely related to *C. lacustris*, Lilljeborg.

GEN. CYPRINOTUS, Brady.

1886. *Cyprinotus*, Brady, J. Linn. Soc., London, vol. xix., No. 114, p. 301.  
1889. *C.*, Sars, On Australian Ostracoda and Copepoda from dried mud, Vid. Selsk. Forhandl. for 1889, No. 8, p. 5.

## CYPRINOTUS AUREUS (Sars).

1895. *Cypris aurea*, Sars, Vid. Selsk. Skr., No. 8, p. 34, pl. 5, fig. 4 a-c.

Raised from the mud of Knysna swamp.

1896. *Cyprinotus a.*, Sars, West Australian Entom., Arch. Naturv. Kristian., vol. xviii., No. 1, p. 25.

## CYPRINOTUS CAPENSIS, G. W. Müller.

1908. *Cyprinotus capensis*, Müller, Deutsche südpol. Exp., pp. 62, 162, figs. 1-7.

Found at Plumstead—Zeekoe Vley and Fishhoek (Simons-town).

## GEN. CYCLOCYPRIS, Brady and Norman.

1889. *Cyclocypris*, Brady and Norman, Trans. R. Dublin Soc., Ser. 2, vol. iv., p. 70.

## CYCLOCYPRIS PUSILLA, Sars.

1895. *Cyclocypris pusilla*, Sars, Vid. Selsk. Skr., No. 8, p. 36, pl. 5, fig. 5 a, b.

Bred from the mud of Knysna swamp.

## GEN. CYPRETTA, Vávra.

1895. *Cypretta*, Vávra, Ostrac. Zanzibar, Jahrb. Hamburg. wiss. Anstalten, vol. xii.

## CYPRETTA SARSI, Brady.

1902. *Cypretta sarsi*, Brady, Trans. Zool. Soc., vol. xvi., pt. 4, p. 195, pl. 25, figs. 10-15.

1907. *C. s.*, Brady, Annals Natal Gov. Mus., vol. i., pt. 2, p. 174.

Collected by Mr. Gibson, at Pietermaritzburg.

## GEN. CYPRIDOPSIS, Brady.

1867. *Cypridopsis*, Brady, Intellectual Observer, vol. xii., p. 117.

1868. *C.*, Brady, Trans. Linn. Soc., vol. xxvi., pt. 2, p. 375.

## CYPRIDOPSIS VIDUELLA, Sars.

1895. *Cypridopsis viduella*, Sars, Vid. Selsk. Skr., No. 8, p. 41, pl. 6, fig. 2 a, b.

Raised from the mud of Knysna swamp.



CYPRIDOPSIS ASSIMILIS, Sars.

1895. *Cypridopsis assimilis*, Sars, Vid. Selsk. Skr., No. 8, p. 42, pl. 6  
fig. 3 a, b.  
Bred with the preceding species.

CYPRIDOPSIS PUNCTILLATA, Brady.

1907. *Cypridopsis punctillata*, Brady, Annals Natal Gov. Mus., vol. i.,  
pt. 2, p. 175, pl. 31, figs. 7-15.  
Obtained by Mr. Gibson, at Pietermaritzburg.

CYPRIDOPSIS TRIQUETRA, G. W. Müller.

1908. *Cypridopsis triquetra*, Müller, Deutsche südpol. Exp., vol. x.,  
pp. 62, 164, figs. 1-9.  
Fished at Plumstead, Zeekoe Vley (Simonstown).

CYPRIDOPSIS ECHINATA, G. W. Müller.

1908. *Cypridopsis echinata*, Müller, Deutsche südpol. Exp., vol. x.,  
pp. 62, 165, figs. 1-6.  
Fishhoek, tolerably abundant.

CYPRIDOPSIS ACULEATA (Costa).

- 1846 (?). *Cypris aculeata*, Costa, Fauna Reg. Napoli, p. 11, pl. 3,  
fig. 5.  
1908. *Cypridopsis a.*, G. W. Müller, Deutsche südpol. Exp., vol. x.,  
pp. 62, 167.  
Plumstead, Zeekoe Vley (Simonstown), abundant.

CYPRIDOPSIS GREGARIA (Sars).

1895. *Potamocypris gregaria*, Sars, Vid. Selsk. Skr., No. 8, p. 43,  
pl. 6, fig. 4 a-c.  
Bred from the mud of the Knysna swamp, developing, Sars  
says, in immense quantities in some of his aquaria, with not  
a single male to be detected in three or four successive  
seasons.  
1908. *Cypridopsis g.*, G. W. Müller, Deutsche südpol. Exp., vol. x.,  
p. 165 footnote.

GEN. PROTEOCYPRIS, Brady.

1907. *Proteocypris*, Brady, Tr. Nat. Hist. Soc. Northumb. and Dur-  
ham, new ser., vol. i., p. 334.

## PROTEOCYPRIS RENIFORMIS, Brady.

1907. *Proteocypris reniformis*, Brady, Annals Natal. Gov. Mus., vol. i., pt. 2, p. 176, pl. 30, figs. 1-9.

Collected by Mr. Gibson, at Somkele, Natal.

## PROTEOCYPRIS (?) GLOBULOIDES, Brady.

1907. *Proteocypris* (?) *globuloides*, Brady, Annals Natal Gov. Mus., vol. i., pt. 2, p. 177, pl. 30, figs. 10-18.

Collected by Mr. Gibson, at Richmond, Natal.

## GEN. STENOCYPRIS, Sars.

1889. *Stenocypris*, Sars, Vid. Selsk. Forhandl. for 1889, No. 8.

1896. *S.*, Brady and Norman, Trans. R. Soc. Dublin, Ser. 2, vol. v., p. 722.

## STENOCYPRIS ALDABRÆ, G. W. Müller.

1898. *Stenocypris aldabræ*, Müller, Ostrac. in Voeltzkow's Madagaskar u. Ost-Afrika, vol. xxi., p. 275, pl. 7, figs. 1-8.

1907. *S. a.*, Brady, Annals Natal Gov. Mus., vol. i., pt. 2, p. 178, pl. 31, figs. 1-6.

Collected by Mr. Gibson at Pietermaritzburg.

## STENOCYPRIS PERARMATA, Brady.

1904. *Stenocypris perarmata*, Brady, Proc. Zool. Soc., p. 126, pl. 8, figs. 50-57.

Collected by Mr. Gibson, near Greytown, Natal.

1910. *S. p.*, Sars, Proc. Zool. Soc., p. 750, pl. 72, figs. 8-10.

## STENOCYPRIS AMETRA, G. W. Müller.

1908. *Stenocypris ametra*, Müller, Deutsche südpol. Exp., vol. x., p. 171 (*typica*), figs. 1-6; p. 173 (*var. minor*), figs. in text.

The *typica* form was obtained in the vley at Lakeside (Simonstown), the *var. minor* at Fishhoek.

## GEN. CYPRICERCUS, Sars.

1895. *Cypricercus*, Sars, Vid. Selsk. Skr., No. 8, p. 37.

1908. *C.*, G. W. Müller, Deutsche südpol. Exp., vol. x., p. 155.

## CYPRICERCUS CUNEATUS, Sars.

1895. *Cypricercus cuneatus*, Sars, Vid. Selsk. Skr., No. 8, p. 38, pl. 6, fig. 1 a-h.

## CYPRICERCUS EPISPÆNA, G. W. Müller.

1908. *Cypricercus episphæna*, Müller, Deutsche südpol. Exp., vol. x., p. 155, figs. 1-8.

From Plumstead—Zeekoe Vley and Fishhoek at Simonstown ; very abundant.

## CYPRICERCUS MACULATUS, G. W. Müller.

1908. *Cypricercus maculatus*, Müller, Deutsche südpol. Exp., vol. x., p. 157, figs. 1-8. *C. maculata* on p. 62.

Plumstead to Zeekoe Vley at Simonstown ; not abundant.

## GEN. CANDONOCYPRIS, Sars.

1894. *Candonocypris*, Sars, Entom. N. Zealand, Vid. Selsk. Skr., No. 5, p. 34.

## CANDONOCYPRIS CANDONOIDES (King).

1851. *Cypris candonoides*, King, Proc. R. S. van Diemen's Land, vol. iii., pt. 1, p. 66, pl. x. f.

1889. *Herpetocypris stanleyana*, Sars, Ostrac. from Austral. mud, Vid. Selsk. Forhandl., p. 35, pl. 2, figs. 1, 2, pl. 5, figs. 5, 6.

1894. *Candonocypris candonoides*, Sars, Vid. Selsk. Skr., No. 5, p. 35, pl. 5, fig. 1 a-c.

1895. *C. c.*, Sars, Vid. Selsk. Skr., No. 8, p. 45.

Bred from the mud of Knysna swamp.

## GEN. ONCOCYPRIS, G. W. Müller.

1898. *Oncocypris*, Müller, Ostrac. in Voeltzkow's Madagaskar und Ost-Afrika, vol. xxi.

## ONCOCYPRIS VOELTZKOWI, G. W. Müller.

1898. *Oncocypris voeltzkowi*, Müller, in Voeltzkow's Madag., vol. xxi., p. 288, pl. i., figs. 1-18.

1907. *O. v.*, Brady, Annals Natal Gov. Mus., vol. i., pt. 2, p. 179.

Plentiful in Mr. Gibson's gatherings from Richmond and Pietermaritzburg.

## GEN. MEGALOCYPRIS, Sars.

1898. *Megalocypris*, Sars, Arch. Naturv. Kristian., vol. xx., No. 8, p. 3.

## \* MEGALOCYPRIS PRINCEPS, Sars.

1898. *Megalocypris princeps*, Sars, Arch. Naturv., vol. xx., No. 8, p. 5, pl. 1.

From a pond on Green Point Common, near Cape Town, and supplied to Sars by the South African Museum. Male reaching 7 mm. in length, female rather longer.

## MEGALOCYPRIS HODGSONI, Sars.

1898. *Megalocypris hodgsoni*, Sars, Arch. Naturv., vol. xx., No. 8, p. 5.

Raised from dried mud, from shallow lake near Port Elizabeth.

## GEN. ISOCYPRIS, G. W. Müller.

1908. *Isocypris*, Müller, Deutsche südpol. Exp., vol. x., pp. 62, 159.

Müller is uncertain as to its distinctness from *Amphicypris*, Sars, 1902.

## ISOCYPRIS PERANGUSTA, G. W. Müller.

1908. *Isocypris perangusta*, Müller, Deutsche südpol. Exp., vol. x., pp. 62, 159, figs. 1-7.

From Plumstead, Zeekoe Vley (Simonstown).

## ISOCYPRIS PRIOMENA, G. W. Müller.

1908. *Isocypris priomena*, Müller, Deutsche südpol. Exp., vol. x., pp. 62, 161, figs. 1-5.

From Plumstead, Zeekoe Vley (Simonstown).

## GEN. ZONOCYPRIS, G. W. Müller.

1898. *Zonocypris*, Müller, Ostrac. in Voeltzkow's Madagaskar und Ost-Afrika, vol. xxi., p. 284.

## ZONOCYPRIS TUBEROSA, G. W. Müller.

1908. *Zonocypris tuberosa*, Müller, Deutsche südpol. Exp., vol. x., pp. 62, 167, figs. 1-5.

Plumstead, Zeekoe Vley at Simonstown.

## MARINE CYPRIDIDÆ.

## GEN. MACROCYPRIS, Brady.

1867. *Macrocypris*, Brady, Intellectual Observer, vol. xii., p. 119.



## MACROCYPRIIS MACULATA (Brady).

1865. *Cytherideis maculata*, Brady, Trans. Zool. Soc., vol. v., p. 367, pl. 57, fig. 12 *a-b*.

1880. *Macrocypris m.*, Brady, Challenger Ostracoda, Reports, vol. i., p. 44, pl. 1, fig. 2 *a-d*.

Dredged at Simon's Bay, at 27 to 37 m. depth.

## MACROCYPRIIS DISPAR, G. W. Müller.

1908. *Macrocypris dispar*, Müller, Deutsche südpol. Exp., vol. x., pp. 62, 96, pl. 13, figs. 1-7.

At Simonstown.

## MACROCYPRIIS AFRICANA, G. W. Müller.

1908. *Macrocypris africana*, Müller, Deutsche südpol. Exp., vol. x., pp. 62, 97, pl. 12, figs. 10, 11, 14-17.

At Simonstown.

## GEN. PONTOCYPRIIS, Sars.

1865. *Pontocypris*, Sars, Vid. Selsk. Forhandl. for 1865, p. 13.

## PONTOCYPRIIS (?) SUBRENIFORMIS, Brady.

1880. *Pontocypris (?) subreniformis*, Brady, Challenger Ostracoda, Reports, vol. i., p. 38, (*Pontocypris (?) subtriangularis* on) pl. 15, fig. 6 *a-d*.

Dredged in Simon's Bay, South Africa, at 27 to 37 m. depth.

## PONTOCYPRIIS GAUSSI, G. W. Müller.

1908. *Pontocypris gaussi*, Müller, Deutsche südpol. Exp., vol. x., pp. 62, 98, pl. 13, figs. 14-18.

At Simonstown.

## PONTOCYPRIIS FLAVA, G. W. Müller.

1908. *Pontocypris flava*, Müller, Deutsche südpol. Exp., vol. x., pp. 62, 98, pl. 13, figs. 19-24.

## FAMILY NESIDEIDÆ

1894. *Bairdiidæ*, G. W. Müller, F. u. Fl. Neapel, vol. xxi., p. 265.

1908. *Nesideidæ*, G. W. Müller, Deutsche südpol. Exp., vol. x., p. 99.

## GEN. NESIDEA, O. G. Costa.

1846. *Nesidea*, Costa, Fauna Reg. Napoli, undated, but proving itself not earlier than 1844.

1894. *Bairdia*, G. W. Müller, F. u. Fl. Neapel, vol. xxi., p. 267.

1908. *Nesidea*, G. W. Müller, Deutsche südpol. Exp., vol. x., p. 99.

In adopting the name *Nesidea* from Müller, I presume that he is right in distinguishing Costa's genus from McCoy's fossil genus *Bairdia*, 1844.

## NESIDEA OVATA (?) (Bosquet).

1853. *Bairdia ovata*, Bosquet, Crust. foss. Limbourg, p. 63, pl. 5, fig. 6 *a-d*.

1865. *B. o.*, Brady, Trans. Zool. Soc., vol. v., p. 364, pl. 57, fig. 7 *a-c*.

1880. *B. o.* (?), Brady, Challenger Ostracoda, Reports, vol. i., p. 53, pl. 7, fig. 3 *a-d*.

Simon's Bay, South Africa, at 27 to 37 m. depth. The earlier references are taken from the Challenger Report.

## FAMILY CYTHERIDÆ.

1894. *Cytheridæ*, G. W. Müller, F. u. Fl. Neapel, vol. xxi., p. 276.

## GEN. CYTHERE, O. F. Müller.

1785. *Cythere*, O. F. Müller, Entomostraca, p. 63.

## CYTHERE EXILIS, Brady.

1880. *Cythere exilis*, Brady, Challenger Ostracoda, Reports, vol. i., p. 69, pl. 16, fig. 5 *a-h*.

Simon's Bay, from 27-37 m. depth.

## CYTHERE CYTHEROPTEROIDES, Brady.

1880. *Cythere cytheropteroides*, Brady, Challenger Ostracoda, Reports, vol. i., p. 78, pl. 15, fig. 5 *a-d*.

Off the Cape of Good Hope, at depth of 274 m.

## CYTHERE FLABELLICOSTATA, Brady.

1880. *Cythere flabellcostata*, Brady, Challenger Ostracoda, Reports, vol. i., p. 88, pl. 13, fig. 6 *a-h*.

Simon's Bay, between 27 and 37 m. depth.

CY THERE CRATICULA, Brady.

1880. *Cythere craticula*, Brady, Challenger Ostracoda, Reports, vol. i., p. 89, pl. 21, fig. 7 *a-d*.  
Simon's Bay, between 27 and 37 m. depth.

CY THERE STOLONIFERA, Brady.

1880. *Cythere stolonifera*, Brady, Challenger Ostracoda, Reports, vol. i., p. 89, pl. 21, fig. 3 *a-d*.  
Simon's Bay, between 27 and 37 m. depth.

CY THERE LEPRALIOIDES, Brady.

1880. *Cythere lepralioides*, Brady, Challenger Ostracoda, Reports, vol. i., p. 94, pl. 19, fig. 5 *a-d*.  
At Simon's Bay, between 27 and 37 m., and off the Cape in 274 m.

GEN. LOXOCONCHA, Sars.

1865. *Loxoconcha*, Sars, Vid. Selsk. Forhandl. for 1865, p. 61.  
1894. *L.*, G. W. Müller, F. u. Fl. Neapel, vol. xxi., p. 342.

LOXOCONCHA SUBRHOMBOIDEA, Brady.

1880. *Loxoconcha subrhomboidea*, Brady, Challenger Ostracoda, Reports, vol. i., p. 121, pl. 28, fig. 4 *a-d*.  
At Simon's Bay, between 27 and 37 m.

GEN. XESTOLEBERIS, Sars.

1865. *Xestoleberis*, Sars, Vid. Selsk. Forhandl. for 1865, p. 66.  
1894. *X.*, G. W. Müller, F. u. Fl. Neapel, vol. xxi., p. 332.

XESTOLEBERIS AFRICANA, Brady.

1880. *Xestoleberis africana*, Brady, Challenger Ostracoda, Reports, vol. i., p. 126, pl. 30, fig. 4 *a-o*.  
At Simon's Bay, between 27 and 37 m.

XESTOLEBERIS CAPENSIS, G. W. Müller.

1908. *Xestoleberis capensis*, Müller, Deutsche südpol. Exp., vol. x., pp. 62, 127, figs. 1-10.  
Simonstown; abundant.

## XESTOLEBERIS RAMOSA, G. W. Müller.

1908. *Xestoleberis ramosa*, Müller, Deutsche südpol, Exp., vol. x., p. 128, figs. 1-8.

At Simonstown, less abundant than *X. capensis*.

## GEN. CYTHERURA, Sars.

1865. *Cytherura*, Sars, Vid. Selsk. Forhandl. for 1865, p. 69.

## CYTHERURA MUCRONATA, Brady.

1880. *Cytherura mucronata*, Brady, Challenger Ostracoda, Reports, vol. i., p. 133, pl. 32, fig. 9 a-d.

At Simon's Bay, between 27 and 37 m.

## CYTHERURA CLAUSI, Brady.

1880. *Cytherura clausi*, Brady, Challenger Ostracoda, Reports, vol. i., p. 134, pl. 32, fig. 8 a-d.

At Simon's Bay, between 27 and 37 m.

## FAMILY CYTHERELLIDÆ.

1865. *Cythereellidæ*, Sars, Vid. Selsk. Forhandl. for 1865, p. 124.

1894. *C.*, G. W. Müller, F. u. Fl. Neapel, vol. xxi., pp. 384, 390.

## GEN. CYTHERELLA, Rupert Jones.

1849. *Cytherella* (subgen), Jones, Cretaceous Entom. England, Palæont. Soc., p. 28.

1852. *C.*, Bosquet, Mem. Sav. Etr. Acad. Belg., vol. xxiv., p. 9.

1894. *C.*, G. W. Müller, F. u. Fl. Neapel, vol. xxi., p. 386.

The reference to Bosquet is borrowed from Müller, but Brady i 80 seems to be right in giving Rupert Jones priority, though in 1863 he himself had assigned the genus to Bosquet.

## CYTHERELLA DROMEDARIA, Brady.

1880. *Cytherella dromedaria*, Brady, Challenger Ostracoda, Reports, vol. i., p. 173, pl. 43, fig. 6 a, b.

St. Simon's Bay, between 27 and 37 m.



TRIBE MYODOCOPA.

1894. *Myodocopa*, G. W. Müller, F. u. Fl. Neapel, vol. xxi., pp. 202, 390.

Müller here includes the Polycopidæ, a family for which Sars instituted the Cladocopa as a separate tribe.

FAMILY POLYCOPEIDÆ.

1865. *Polycopidæ*, Sars, Vid. Selsk. Forhandl. for 1865, p. 121.  
1894. *P.*, G. W. Müller, F. u. Fl. Neapel, vol. xxi., pp. 231, 390.

GEN. POLYCOPE, Sars.

1865. *Polycope*, Sars, Vid. Selsk. Forhandl. for 1865, p. 121.  
1894. *P.*, G. W. Müller, F. u. Fl. Neapel, vol. xxi., p. 233.

POLYCOPE ORBICULARIS, Sars.

1865. *Polycope orbicularis*, Sars, Vid. Selsk. Forhandl. for 1865, p. 122.  
1880. *P. o.*, Brady, Challenger Ostracoda, Reports, vol. i., p. 169.  
"Off the Cape of Good Hope (?), 150 fathoms," 274 m.

FAMILY HALOCYPRIDÆ.

1853. *Halocypridæ*, Dana, U.S. Expl. Exp., vol. xiii., p. 1281.  
1894. *H.*, G. W. Müller, F. u. Fl. Neapel, vol. xxi., pp. 221, 390.  
1906. *H.*, G. W. Müller, Wiss. Ergebn. Deutsche Tiefsee Exp., Valdivia Ostracoda, vol. viii., p. 30.

GEN. HALOCYPRIS, Dana.

1853. *Halocypris*, Dana, U.S. Expl. Exp., vol. xiii., pp. 1277, 1281, 1301.  
1906. *H.*, G. W. Müller, Valdivia Ostracoda, Reports, vol. viii., p. 46.

\* HALOCYPRIS INFLATA, Dana.

1853. *Halocypris inflata*, Dana, U.S. Expl. Exp., vol. xiii., p. 1301, pl. 91, fig. 8, *a-i, k*.  
1890. *H. pelagica*, Claus, Arbeit. Zool. Inst. Wien., vol. ix., p. 25.

1905. *H. p.*, Cleve, Marine Investigations in S. Africa, vol. iv., p. 131.  
Agulhas Current, off Port Shepstone, 900 m. Sent by Dr. Gilchrist.
1906. *H. inflata*, G. W. Müller, Valdivia Ostracoda, p. 50, pl. 7 (3), figs. 19–28.  
Lat. 34° 31' S., long. 26° 0' E., depth 1,000 m., and lat. 35° 32' S., long. 18° 20' E., depth 2,000 m.
1908. *H. i.*, G. W. Müller, Deutsche südpol. Exp., vol. x., pp. 57, 65.  
Port Natal, surface.

## HALOCYPRIS GLOBOSA (Claus).

1874. *Halocypria globosa*, Claus, Schriften zool. Inhalts, Wien, pt. 1, p. 7, pl. 3, figs. 36, 39.
1906. *Halocypris g.*, G. W. Müller, Valdivia Ostracoda, pp. 47, 138, pl. 8 (4), figs. 13–16, pl. 35 (31), fig. 1.  
Müller, from whom the reference to Claus is taken, names this species, with many others, as obtained at lat. 35° 32' S., long. 18° 20' E., outside the Agulhas Bank, depth 2,000 m.

## GEN. CONCHÆCIA, Dana.

1849. *Conchæcia*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 51.
1906. *Conchæcia*, G. W. Müller, Valdivia Ostracoda, p. 51.  
Except the citations from Professor Cleve, the records for this genus and its immediate neighbours depend almost entirely on Müller's important work here cited.

## CONCHÆCIA SPINIFERA (Claus).

1890. *Paraconchæcia spinifera*, Claus, Arbeit. zool. Inst. Wien, vol. ix., p. 14.
1906. *Conchæcia s.*, G. W. Müller, Valdivia Ostracoda, p. 56, pl. 9 (5), figs. 1–10, 14, 15.  
Lat. 35° 32' S., long. 18° 20' E., depth 2,000 m.

## \* CONCHÆCIA OBLONGA (Claus).

1890. *Paraconchæcia oblonga*, Claus, Arbeit. zool. Inst. Wien, vol. ix., p. 13.
1905. *P. o.*, Cleve, Mar. Invest. S. Africa, vol. iv., p. 132.  
Agulhas Current, off Port Shepstone, 530 m.
1906. *Conchæcia o.*, G. W. Müller, Valdivia Ostracoda, p. 58, pl. 9 (5), figs. 11–13, 16–25.  
Lat. 34° 31' S., long. 26° 0' E., 1,000 m., and lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## CONCHÆCIA ALLOTHERIUM, G. W. Müller.

1906. *Conchæcia allotharium*, Müller, Valdivia Ostracoda, p. 59, pl. 11 (7), figs. 15-19.

Lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## CONCHÆCIA HIRSUTA, G. W. Müller.

1906. *Conchæcia hirsuta*, Müller, Valdivia Ostracoda, p. 60, pl. 11 (7), figs. 1-3, 6-10.

Lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## CONCHÆCIA ELEGANS, Sars.

1865. *Conchæcia elegans*, Sars, Vid. Selsk. Forhandl. for 1865, p. 117.

1906. *C. e.*, G. W. Müller, Valdivia Ostracoda, p. 69, pl. 13 (9), figs. 10, 11, 19-16.

Lat. 34° 31' S., long. 16° 0' E., 1,000 m., and lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## CONCHÆCIA BRACHYASKOS, G. W. Müller.

1906. *Conchæcia brachyaskos*, Müller, Valdivia Ostracoda, p. 70, pl. 14 (10), figs. 1, 2, 7-14. (*C. brachyascos* in 1908.)

Lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## CONCHÆCIA PROCERA, G. W. Müller.

1894. *Conchæcia procera*, Müller, F. u. Fl. Neapel, vol. xxi., p. 228, pl. 6, figs. 47, 48, 50-58.

1906. *C. p.*, Müller, Valdivia Ostracoda, p. 71, pl. 13 (9), figs. 37-47, pl. 14 (10), figs. 3-6.

Lat. 34° 31' S., long. 26° 0' E., 1,000 m., and lat. 35° 2' S., long. 18° 20' E., 2,000 m.

1908. *C. p.*, Müller, Deutsche südpol. Exp., vol. x., pp. 57, 68.

Port Natal, surface.

## \* CONCHÆCIA ACUMINATA (Claus).

1890. *Conchæcetta acuminata*, Claus, Arbeit. zool. Inst. Wien vol. ix., p. 16.

1905. *C. a.*, Cleve, Mar. Invest. S. Africa, vol. iv., p. 135.

Agulhas Current, Cape Natal, W. by N. 6½ miles, 97 m. Sent by Dr. Gilchrist.

1906. *Conchæcia a.*, G. W. Müller, Valdivia Ostracoda, p. 76, pl. 15 (11), figs. 17-23.

Lat. 34° 31' S., long. 26° 0' E., 1,000 m.

## CONCHÆCIA OBTUSATA, Sars.

1865. *Conchæcia obtusata*, Sars, Vid. Selsk. Forhandl. for 1865, p. 118.

1906. *C. o.*, var. *antarctica*, G. W. Müller, Valdivia Ostracoda, p. 77, pl. 16 (12), figs. 10-23.

Lat. 35° 32' S., long., 18° 20' E., 2,000 m.

## CONCHÆCIA KYRTOPHORA, G. W. Müller.

1906. *Conchæcia kyrtophora*, Müller, Valdivia Ostracoda, p. 82, pl. 17 (13), figs. 1-10.

Lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## CONCHÆCIA NASOTUBERCULATA, G. W. Müller.

1906. *Conchæcia nasotuberculata*, Müller, Valdivia Ostracoda, p. 83, pl. 18 (14), figs. 25-30.

Lat. 34° 31' S., long. 26° 0' E., 1,000 m., and lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## CONCHÆCIA ROTUNDATA, G. W. Müller.

1891. *Conchæcia rotundata*, Müller, Zool. Jahrb., vol. v., p. 275, pl. 28, figs. 41-43, pl. 29, fig. 44.

1906. *C. r.*, Müller, Valdivia Ostracoda, p. 83, pl. 17 (13), figs. 23-34.

Lat. 33° 20' S., long. 15° 58' E., Benguela Current, 200 m., lat. 34° 31' S., long. 26° 0' E., 1,000 m., and lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## CONCHÆCIA CURTA, Lubbock.

1860. *Conchæcia curta*, Lubbock, Trans. Linn. Soc., vol. xxiii., p. 188, pl. 29, figs. 31, 32.

1906. *C. c.*, G. W. Müller, Valdivia Ostracoda, p. 86, pl. 30 (26), figs. 1-9.

Lat. 35° 32' S., long. 18° 20' E., 2,000 m.

1908. *C. c.*, G. W. Müller, Deutsche südpol. Exp., vol. x., p. 87. Port Natal, surface.

## CONCHÆCIA ACUTICOSTA, G. W. Müller.

1906. *Conchæcia acuticosta*, Müller, Valdivia Ostracoda, p. 87, pl. 30 (26), figs. 18-21.

Lat. 35° 32' S., long. 18° 20' E., 2,000 m.



## \* CONCHÆCIA CLAUSII (Sars).

1887. *Halocypris clausii*, Sars, Ostrac. Mediterranea, p. 87, pl. 11, figs. 7-10, pl. 14, figs. 6-18.  
1890. *Microconchæcia c.*, Claus, Arbeit. zool. Inst. Wien, p. 22.  
1894. *Conchæcia c.*, G. W. Müller, F. u. Fl. Neapel, vol. xxi., p. 230, pl. 6, figs. 21, 23-30, pl. 8, figs. 31, 32.  
1905. *Microconchæcia c.*, Cleve, Mar. Invest. S. Africa, vol. iv., p. 131.

Agulhas Current, off Port Shepstone, 530-990 m. Sent by Dr. Gilchrist.

## CONCHÆCIA ECHINULATA (Claus).

1891. *Microconchæcia clausii*, var. *echinulata*, Claus, Halocypriden Atl. Oc. u. Mittelmeeres, pl. 20, figs. 1-6 (? var. *lævis*, p. 75).  
1906. *Conchæcia echinulata*, G. W. Müller, Valdivia Ostracoda, p. 88, pl. 30 (26), figs. 10-17.  
Lat. 34° 31' S., long. 26° 0' E., 1,000 m.

## \* CONCHÆCIA HADDONI, Brady and Norman.

1896. *Conchæcia haddoni*, Brady and Norman, Trans. R. Dublin Soc., Ser. 2, vol. v., p. 690, pl. 64, figs. 6-16.  
1905. *C. h.*, Cleve, Mar. Invest. S. Africa, vol. iv., p. 130.  
Agulhas Current, Port Shepstone, NW. by W.  $\frac{3}{4}$  N., 12 miles, 530 m. Sent by Dr. Gilchrist.  
1906. *C. h.* (?), G. W. Müller, Valdivia Ostracoda, p. 89, pl. 18 (14), figs. 1-10.  
Lat. 34° 31' S., long. 26° 0' E., 1,000 m., and lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## \* CONCHÆCIA BISPINOSA, Claus.

1890. *Conchæcia bispinosa*, Claus, Arbeit. zool. Inst. Wien, vol. ix., p. 10.  
1905. *C. b.*, Cleve, Mar. Invest. S. Africa, vol. iv., p. 129.  
Agulhas Current, Cape Natal, N. by E., 24 miles, 780 m., and Port Shepstone, NW. by W.  $\frac{3}{4}$  N., 12 miles, 530-900 m. Sent by Dr. Gilchrist.  
1906. *C. b.*, G. W. Müller, Valdivia Ostracoda, p. 90, pl. 18 (14), figs. 12-19.  
Lat. 34° 31' S., long. 26° 0' E., 1,000 m., and lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## CONCHÆCIA ATLANTICA (Lubbock).

1856. *Halocypris atlantica*, Lubbock, Trans. Entom. Soc. London, n. ser., vol. iv., p. 28, pl. 12, figs. 1-8.  
 1906. *Conchæcia a.*, G. W. Müller, Valdivia Ostracoda, p. 92, pl. 5 (1), figs. 6, 7, pl. 19 (15), figs. 17-28.  
 Lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## CONCHÆCIA LORICATA (Claus).

1894. *Conchæcissa loricata*, Claus, Denkschriften Ak. Wien, vol. lxi., p. 4, pl. 3, figs. 24-30.  
 1906. *Conchæcia l.*, G. W. Müller, Valdivia Ostracoda, p. 95, pl. 22 (18), figs. 1-9.  
 Lat. 34° 31' S., long. 26° 0' E., 1,000 m., and lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## CONCHÆCIA CTENOPHORA, G. W. Müller.

1906. *Conchæcia ctenophora*, Müller, Valdivia Ostracoda, p. 96, pl. 22 (18), figs. 16-20, 29.  
 Lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## CONCHÆCIA SERRULATA, Claus.

1874. *Conchæcia serrulata*, Claus, Schriften zool. Inhalts, Wien, pt. 1, p. 6, pl. 1, figs. 2, 6, 6b, 7, 9, 10.  
 1906. *C. s.*, G. W. Müller, Valdivia Ostracoda, p. 97, pl. 22 (18), fig. 24, pl. 23 (19), figs. 20-30.  
 Lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## CONCHÆCIA LOPHURA, G. W. Müller.

1906. *Conchæcia lophura*, Müller, Valdivia Ostracoda, p. 99, pl. 20 (16), figs. 1-10.  
 Lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## CONCHÆCIA PARVIDENTATA, G. W. Müller.

1906. *Conchæcia parvidentata*, Müller, Valdivia Ostracoda, p. 100, pl. 20 (16), figs. 11-18.  
 Lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## CONCHÆCIA HYALOPHYLLUM, Claus.

1890. *Conchæcia hyalophyllum*, Claus, Arbeit. zool. Inst. Wien, vol. ix., p. 11.

1906. *C. h.*, G. W. Müller, Valdivia Ostracoda, p. 101, pl. 20 (16),  
figs. 19–26.  
Lat. 35° 32' S., long. 12° 20' E., 2,000 m.

\* CONCHÆCIA SUBARCUATA, Claus.

1890. *Conchæcia subarcuata*, Claus, Arbeit. zool. Inst. Wien, vol. ix.,  
p. 9.  
1905. *C. s.*, Cleve, Mar. Invest. S. Africa, vol. iv., p. 130.  
Agulhas Current, Cape Natal, N. by E., 24 miles, 780 m.,  
and W. by N., 6½ miles, 97 m., and Port Shepstone,  
530 m.  
1906. *C. s.*, G. W. Müller, Valdivia Ostracoda, p. 102, pl. 21 (17),  
figs. 10–16, 19.  
Lat. 34° 31' S., long. 26° 0' E., 1,000 m., and lat. 35° 32' S.,  
long. 18° 20' E., 2,000 m.

\* CONCHÆCIA MAGNA, Claus.

1874. *Conchæcia magna*, Claus, Schriften. zool. Inhalts, Wien, pt. 1,  
p. 6, pl. 1, fig. 6c, pl. 2, figs. 16, 18.  
1905. *C. m.*, Cleve, Mar. Invest. S. Africa, vol. iv., p. 130.  
Agulhas Current, Port Shepstone, 530–900 m.  
1906. *C. m.*, G. W. Müller, Valdivia Ostracoda, p. 103, pl. 21 (17),  
figs. 17, 18, 20, 26.  
Var. *typica*, at lat. 34° 31' S., long. 26° 0' E., 1,000 m., and  
lat. 35° 32' S., long. 18° 20' E., 2,000 m.

\* CONCHÆCIA STRIOLATA, Sars.

1888. *Conchæcia striolata*, Sars, Arch. Naturv. Kristian., vol. xii.,  
p. 256, pl. 14, figs. 1–5.  
1905. *C. s.*, Cleve, Mar. Invest. S. Africa, vol. iv., p. 130.  
Agulhas Current, Port Shepstone, 530 m. A single speci-  
men, sent by Dr. Gilchrist.

CONCHÆCIA SPINIROSTRIS, Claus.

1874. *Conchæcia spinirostris*, Claus, Schriften zool. Inhalts, Wien,  
pt. 1, p. 6, pl. 1, figs. 1, 6a, 8, pl. 2, figs. 11,  
14, 15.  
1906. *C. s.*, G. W. Müller, Valdivia Ostracoda, p. 104, pl. 22 (18),  
figs. 21–23, 25–28.  
Lat. 34° 31' S., long. 26° 0' E., 1,000 m., and lat. 35° 32' S.,  
long 18° 20' E., 2,000 m.

## CONCHÆCIA AMBLYPOSTHA, G. W. Müller.

1906. *Conchæcia amblypostha*, Müller, Valdivia Ostracoda, p. 108, pl. 24 (20), figs. 17-22.

Lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## CONCHÆCIA TYLODA, G. W. Müller.

1906. *Conchæcia tyloda*, Müller, Valdivia Ostracoda, pp. 109, 138, pl. 25 (21), figs. 2-13.

Lat. 34° 20' S., long. 18° 36' E., 70 m., in Simon's Bay.

## CONCHÆCIA RHYNCHENA, G. W. Müller.

1906. *Conchæcia rhynchena*, Müller, Valdivia Ostracoda, p. 113, pl. 26 (22), figs. 17-25.

Lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## CONCHÆCIA SYMMETRICA, G. W. Müller.

1906. *Conchæcia symmetrica*, Müller, Valdivia Ostracoda, p. 117, pl. 27 (23), figs. 7, 8, 13, 15, 16.

Lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## CONCHÆCIA AMETRA, G. W. Müller.

1906. *Conchæcia ametra*, Müller, Valdivia Ostracoda, p. 117, pl. 27 (23), figs. 11, 12, 14, 17-19.

Lat. 35° 32' S., long. 18° 20' E., 2,000 m.

In the Ostracoda of the Deutsche südpol. Exp., p. 78, Müller gives *C. insignis*, Vávra, 1906, and *C. ritteri*, Juday, 1906, as synonyms of this species, but no longer includes "*? Halocypris imbricata*, Brady, 1880," in the synonymy.

## \* CONCHÆCIA IMBRICATA (Brady).

1880. *Halocypris imbricata* (part), Brady, Challenger Ostracoda, Reports, vol. i., p. 167, pl. 41, figs. 1-10, pl. 42, figs. 1-8.

1905. *Conchæcissa i.*, Cleve, Mar. Invest. S. Africa, vol. iv., p. 131.

West Coast, Table Mountain, N. 79° E., 40 miles, 450 m.; Agulhas Current, Cape Natal, 780 m., and off Port Shepstone, 530-900 m. Sent by Dr. Gilchrist.

1906. *Conchæcia i.*, G. W. Müller, Valdivia Ostracoda, p. 118, pl. 28 (24), figs. 1-6.

Lat. 34° 31' S., long. 26° 0' E., 1,000 m., and lat. 35° 32' S., long. 18° 20' E., 2,000 m.



## CONCHÆCIA CHUNI, G. W. Müller.

1906. *Conchæcia chuni*, Müller, Valdivia Ostracoda, p. 124, pl. 31 (27), figs. 16-28.

Lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## \* CONCHÆCIA DAPHNOIDES (Claus).

1890. *Conchæcilla daphnoides*, Claus, Arbeit. zool. Inst. Wien, vol. ix., p. 18.

1905. *C. d.*, Cleve, Mar. Invest. S. Africa, vol. iv., p. 130.

West Coast, Table Mountain, N. 79° E., 40 miles, 450 m.; Agulhas Current, Cape Natal, N. by E., 24 miles, 780 m.

1896. *C. lacerta*, Brady and Norman, Trans. R. Dublin Soc., Ser. 2, vol. v., p. 697, pl. 62, figs. 1-4, pl. 65, figs. 1-10.

1905. *C. l.*, Cleve, Mar. Invest. S. Africa, vol. iv., p. 130.

Agulhas Current, Cape Natal, N. by E., 24 miles, 780 m., and off Port Shepstone, 530-900 m. Brady and Norman regard this species as closely akin to *C. daphnoides*, with which Müller definitely unites it.

1906. *Conchæcia daphnoides*, G. W. Müller, Valdivia Ostracoda, p. 126, pl. 31 (27), figs. 1-15.

Lat. 34° 31' S., long. 26° 0' E., 1,000 m., and lat. 35° 32' S., long. 18° 20' E., 2,000 m. Müller distinguishes two varieties as *typica* and *minor*.

## GEN. EUCONCHÆCIA, G. W. Müller.

1891. *Euconchæcia*, Müller, Zool. Jahrb., vol. v., p. 267.

## \* EUCONCHÆCIA CHIERCHIE, G. W. Müller.

1891. *Euconchæcia chierchie*, Müller, Zool. Jahrb., vol. v., p. 277, pl. 28, figs. 1-10.

1905. *E. c.*, Cleve, Mar. Invest. S. Africa, vol. iv., p. 131.

Agulhas Current, off Port Shepstone, 900 m.

1906. *E. c.*, Müller, Valdivia Ostracoda, p. 128, pl. 32 (28), figs. 8-17.

Lat. 34° 31' S., long. 26° 0' E., 1,000 m., and lat. 35° 26' S., long. 20° 56' E., Agulhas Bank, 80 m.

## GEN. ARCHICONCHÆCIA, G. W. Müller.

1894. *Archiconchæcia*, Müller, F. u. Fl. Neapel, vol. xxi., p. 225.

## ARCHICONCHÆCIA STRIATA, G. W. Müller.

1894. *Archiconchæcia striata*, Müller, F. u. Fl. Neapel, vol. xxi., p. 125, pl. 6, figs. 31-46, pl. 8, fig. 34.  
 1906. *A. s.*, Müller, Valdivia Ostracoda, p. 45, pl. 7 (3), figs. 13-17.  
 Lat. 34° 31' S., long. 26° 0' E., 1,000 m.

## \* ARCHICONCHÆCIA CUCULLATA (Brady).

1902. *Conchæcissa cucullata*, Brady, Trans. Zool. Soc., vol. xvi., pt. 4, p. 191, pl. 24, figs. 1-8.  
 1905. *C. c.*, Cleve, Mar. Invest. S. Africa, p. 131.  
 Agulhas Current, off Port Shepstone, 530-900 m.  
 1906. *Archiconchæcia c.*, G. W. Müller, Valdivia Ostracoda, p. 44, pl. 7 (3), figs. 7-12, 18.

## FAMILY CYPRIDINIDÆ.

1850. *Cypridinadæ*, Baird, Brit. Entomostraca, Ray Soc., p. 176.  
 1868. *Cypridinidæ*, Brady, Trans. Linn. Soc., vol. xxvi., pt. 2, p. 462.  
 1894. *C.*, G. W. Müller, F. u. Fl. Neapel, vol. xxi., p. 203.

## GEN. CYPRIDINA, Milne-Edwards.

1838. *Cypridina*, Milne-Edwards, Lamarck's Anim. sans Vertèbres, ed. 2, vol. v., p. 178.  
 1840. *C.*, Milne-Edwards, Hist. Nat. Crust., vol. iii., p. 409.

## CYPRIDINA CASTANEA, Brady.

1897. *Cypridina castanea*, Brady, Trans. Zool. Soc., vol. xiv., pt. 3, p. 88, pl. 16, figs. 1-4.  
 1906. *C. c.*, G. W. Müller, Valdivia Ostracoda, p. 130, pl. 5 (1), figs. 1, 2, pl. 33 (29), figs. 11-16, pl. 34 (30), figs. 10-13.  
 Lat. 35° 32' S., long. 18° 20' E., 2,000 m.

## \* CYPRIDINA CAPENSIS, Cleve.

1905. *Cypridina capensis*, Cleve, Mar. Invest. S. Africa, vol. iv., pp. 133, 135, pl. 7, figs. 1, 6, 7, pl. 8, figs. 1, 12, 13, pl. 9, fig. 21.  
 Agulhas Bank, off Cape Infanta, 74 miles; West Coast, off Lion's Head, 250 miles; off Table Mountain, 450 miles. Sent by Dr. Gilchrist.

\* CYPRIDINA CAUDATA, Cleve.

1905. *Cypridina caudata*, Cleve, Mar. Invest. S. Africa, vol. iv.  
pp. 134, 135, pl. 7, figs. 2, 2A, pl. 9, figs. 14, 19, 20.  
West Coast, off Lion's Head, (depth) 277 m. Sent by Dr.  
Gilechrist.

\* CYPRIDINA NOBILIS, Cleve.

1905. *Cypridina nobilis*, Cleve, Mar. Invest. S. Africa, vol. iv.,  
pp. 134, 135, pl. 7, figs. 3-5, 8, pl. 8, figs. 10, 11, pl. 9,  
figs. 15-18, 22.  
West Coast, off Table Mountain, (depth) 430 m. Sent by  
Dr. Gilechrist; length of specimen (male) 5.3 mm.

CYPRIDINA VANHÖFFENI, G. W. Müller.

1908. *Cypridina vanhoeffeni*, Müller, Deutsche südpol. Exp., vol. x.,  
pp. 62, 82, pl. 5, figs. 1-8, 13.  
About 6,000 specimens taken at Simonstown, chiefly in  
dead sea-animals, such as Trigla and Sepia.

CYPRIDINA DORSOSERRATA, G. W. Müller.

1908. *Cypridina dorsoserrata*, Müller, Deutsche südpol. Exp., vol.  
x., pp. 62, 83, pl. 4, figs. 1-3, 5-10.  
At Simonstown with the next preceding species; said to be  
near to *C. capensis*, Cleve.

CYPRIDINA ARBOREA, G. W. Müller.

1908. *Cypridina arborea*, Müller, Deutsche südpol. Exp., vol. x.,  
pp. 62, 86, pl. 6, figs. 1-8.  
At Simonstown. Müller thinks it possibly identical with  
*C. caudata*, Cleve.

GEN. CYLINDROLEBERIS, Brady.

1867. *Cylindroleberis*, Brady, Intellectual Observer, vol. xii.,  
p. 127.

CYLINDROLEBERIS OBLONGA (Grube).

1859. *Cypridina oblonga*, Grube, Arch. Naturg., vol. xxv., p. 335.  
1894. *Cypridina o.*, G. W. Müller, F. u. Fl. Neapel, vol. xxi., p. 219,  
pl. 4, figs. 14-18, 39, 41, 49-55, pl. 5, figs. 1, 4, 5, 13, 14,  
33, 41-44, pl. 8, fig. 4.  
1908. *C. o.*, Müller, Deutsche südpol. Exp., vol. x., pp. 62, 94.  
At Simonstown.

## GEN. PYROCYPRIIS, G. W. Müller.

1891. *Pyrocypriis*, Müller, Zool. Jahrb., vol. v., p. 230.

## \* PYROCYPRIIS CHIERCHIE, G. W. Müller.

1891. *Pyrocypriis chierchie*, Müller, Zool. Jahrb., vol. v., p. 232, pl. 25, fig. 1, &c.  
 1905. *P. c.*, Cleve, Mar. Invest. S. Africa, vol. iv., p. 134.  
 Agulhas Current, Port St. John, (depth) 20-30 m. Sent by Dr. Gilchrist.

## GEN. CROSSOPHORUS, Brady.

1880. *Crossophorus*, Brady, Challenger Ostracoda, Reports, vol. i., p. 157.  
 1902. *C.*, Stebbing, S.A. Crustacea, pt. 2, p. 77.  
 1906. *C.*, G. W. Müller, Valdivia Ostracoda, p. 133.

## \* CROSSOPHORUS AFRICANUS, Stebbing.

1901. *Crossophorus africanus*, Stebbing, Knowledge, vol. xxiv., p. 100.  
 1902. *C. a.*, Stebbing, S.A. Crustacea, pt. 2, p. 79, pls. 15A, 16.  
 Nos. 56, 57, specimens sent by Dr. Gilchrist, Cape St. Blaize, N. by E. 67 miles, from depth between 165 and 183 m., and Cape St. Blaize, N. by E. 73 miles, depth 229 m.  
 1906. *C. a.*, G. W. Müller, Valdivia Ostracoda, p. 134, pl. 34 (30), figs. 1-9.  
 Müller also found the isopod *Cyproniscus crossophori* parasitic in the shell of this giant Ostrapod.

## COPEPODA.

1834. "*Copépodes*," Milne-Edwards, Hist. Nat. Crust., vol. i., p. 199.  
 1840. *C.*, Milne-Edwards, Hist. Nat. Crust., vol. iii., p. 411.

Scudder's *Nomenclator zoologicus* gives "*Copepoda* Latr. Crust. 1831. A." But the term does not appear in Latreille's Cours d'Entomologie, 1831. Milne-Edwards, however, introduces it in its French form in 1834 without any indication of its being a novelty, and yet with no reference to any work in which it may have made an earlier appearance. Das Tierreich dates it from 1840.



## TRIBE GYMNOPLEA or CALANIDEA.

1892. *Gymnoplea*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 41.  
 1898. *G.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 7.  
 1903. *Calanoida*, Sars, Crustacea of Norway, vol. iv., pp. 2, 5.

## FAMILY CALANIDÆ.

1849. *Calanidæ*, Dana, Proc. Amer. Ac. Sci., vol. ii., p. 9.  
 1898. *C.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 12.  
 The family Calanidæ is here taken in a much more extended sense than that adopted by Professor G. O. Sars in his Crustacea of Norway, vol. iv., 1903.

## GEN. CALANUS, Leach.

1819. *Calanus*, Leach, Dict. Sci. Nat., vol. xiv., p. 539.  
 1898. *C.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 12.

## \* CALANUS FINMARCHICUS (Gunner).

1765. *Monoculus finmarchicus*, Gunner, Skr. Kjöbenh. Selsk., vol. x., p. 175, fig. 20-23.  
 1898. *Calanus f.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 14.  
 1904 (?). *C. f.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 185.

"Common south of the Cape Colony, rare east and west."  
 Sent by Dr. Gilchrist.

It may suffice here to say, once for all, that the Copepoda cited from the Memoir by Professor R. T. Cleve were all derived from Dr. Gilchrist's marine investigations on board the *Pieter Faure*. In his valuable Introduction Professor Cleve says: "The region of South Africa is of the greatest interest in its planktonological aspect, as it represents a battlefield of two mighty currents of different origin, the Agulhas Current and the Westwind Drift. The former carries the warm water of the Indian Equatorial Current towards the south, the latter the water of the Southern Pacific Ocean through the space between Fuegia and the Antarctic Continent. The east coast of South Africa has a steep slope so that depths of 900 to 3,000 metres (500 to 1,800 fathoms) will be found at a short distance from the land. On the south side,

from about Algoa Bay to the Cape of Good Hope, extends the triangular Agulhas Bank, its southern point being about 2 degrees of latitude south of Cape Infanta. The depths in this region are comparatively small, as a rule 70 to 100 metres (40 to 60 fathoms)." Other useful details follow.

\* *CALANUS TENUICORNIS*, Dana.

1849. *Calanus tenuicornis*, Dana, Proc. Amer. Ac. Sci., vol. ii., p. 15.  
 1898. *C. t.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 18.  
 1904. *C. t.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 186.  
 "Sparingly east and west of South Africa."

\* *CALANUS COMMUNIS*, Dana.

1849. *Calanus communis*, Dana, Proc. Amer. Ac. Sci., vol. ii., p. 17.  
 1849. *Undina vulgaris*, Dana, Proc. Amer. Ac. Sci., vol. ii., p. 22.  
 1898. *Calanus v.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 17.  
 I do not know why the page precedence of the specific name *communis* is overruled in Das Tierreich.  
 1904. *C. v.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 186.  
 Agulhas Current.

\* *CALANUS BREVICORNIS*, Lubbock.

1856. *Calanus brevicornis*, Lubbock, Trans. Ent. Soc. London, n. ser., vol. iv., p. 11, pl. 3.  
 1898. *C. b.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 16.  
 1904. *C. b.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 185.  
 "Common south and west of the Cape Colony, sparingly east of Natal."

\* *CALANUS DARWINII* (Lubbock).

1860. *Undina darwinii*, Lubbock, Trans. Linn. Soc. London, vol. xxiii., p. 7, pl. 29.  
 1892. *Calanus d.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 91, pl. 6, fig. 5, pl. 7, fig. 29, pl. 8, figs. 11, 37.  
 1898. *C. darwini*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 17.  
 1904. *C. d.*, Cleve, Mar. Invest., S. Africa, vol. iii., p. 185.  
 Agulhas Current.

## \* CALANUS MINOR (Claus).

1863. *Cetochilus minor*, Claus, Die freilebenden Copepoden, p. 172.  
 1898. *Calanus m.*, Giesbrecht and Schmeil, Das Tierreich vol. vi., p. 15.  
 1904. *C. m.*, Cleve, Mar. Invest., vol. iii., p. 186.  
 "Very common south of the Cape Colony, rarer west thereof and extremely rare in the east."

## GEN. EUCALANUS, Dana.

1853. *Eucalanus*, Dana, U.S. Expl. Exp., vol. xiii., p. 1082.

This genus was instituted very obscurely by Dana on p. 1082 (not p. 1079 as stated in Das Tierreich) for his *Calanus attenuatus*, although, as Dr. G. S. Brady points out in his Challenger Copepoda, Dana retains the name *Calanus attenuatus* while assigning the species to another genus. I may add that he does not give *Eucalanus* in his Corrigenda or his Index, and *Calanus attenuatus* appears on pl. 75 of his Atlas, published in 1855.

1898. *E.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 19.

## \* EUCALANUS ELONGATUS (Dana).

1849. *Calanus elongatus*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 18.  
 1898. *Eucalanus e.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 20.  
 Brady, in his Challenger Copepoda, regards this species as a synonym of *E. attenuatus*. Were that view accepted, the name *elongatus* would claim page precedence.  
 1904. *E. e.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 189.  
 Agulhas Current.

## \* EUCALANUS ATTENUATUS (Dana).

1849. *Calanus attenuatus*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 18.  
 1853. *Eucalanus a.*, Dana, U.S. Expl. Exp., vol. xiii., p. 1082,  
*Calanus a.*, pp. 1079, 1080, pl. 75, fig. 2 a-c, m.  
 1898. *E. a.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 20.  
 1904. *E. a.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 189.  
 Agulhas Current.

## \* EUCALANUS SUBTENUIS, Giesbrecht.

1888. *Eucalanus subtenuis*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 333.

1898. *E. s.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 21.

1904. *E. s.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 190.

Agulhas Current.

\* *EUCALANUS MONACHUS*, Giesbrecht.

1888. *Eucalanus monachus*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 333.

1898. *E. m.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 21.

1904. *E. m.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 189.

Agulhas Current.

\* *EUCALANUS MUCRONATUS*, Giesbrecht.

1888. *Eucalanus mucronatus*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 333.

1898. *E. m.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 21.

1904. *E. m.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 189.

\* *EUCALANUS CRASSUS*, Giesbrecht.

1888. *Eucalanus crassus*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 333.

1898. *E. c.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 22.

1904. *E. c.*, Cleve, Mar. Invest. S. Africa, vol. iv., p. 189.

Agulhas Current. False Bay.

\* *EUCALANUS SUBCRASSUS*, Giesbrecht.

1888. *Eucalanus subcrassus*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 334.

1898. *E. s.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 22.

1904. *E. s.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 190.

Agulhas Current.

\* *EUCALANUS PILEATUS*, Giesbrecht.

1888. *Eucalanus pileatus*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 334.

1898. *E. p.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 21.

1904. *E. p.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 189.

Agulhas Current.

GEN. *RHINCALANUS*, Dana.

1853. *Rhincalanus*, Dana, U.S. Expl. Exp., vol. xiii., pp. 1044, 1082.

1904. *Rhinocalanus*, Cleve, Mar. Invest. S. Africa, vol. iv., pp. 181, 196.



## \* RHINCALANUS ROSTRIFRONS (Dana).

1849. *Calanus rostrifrons*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 19.

1849. *Calanus cornutus*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 19.

Since this name is accepted as a synonym of *C. rostrifrons*, to which Dana has given page precedence both in 1849 and 1853, it seems clear that *rostrifrons* is the right name to adopt for the species.

1853. *Rhincalanus rostrifrons*, Dana, U.S. Expl. Exp., vol. xiii., p. 1082, pl. 76, fig. 1 *a*, *b*.

1883. *R. cornutus*, Brady, Challenger Copepoda, Reports, vol. viii., p. 41, pl. 7, figs. 1-10.

1898. *R. c.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 23.

1904. *Rhinocalanus c.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 196.  
Agulhas Current, not rare.

## \* RHINCALANUS NASUTUS, Giesbrecht.

1888. *Rhincalanus nasutus*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 334.

1898. *R. n.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 22.

1904. *Rhinocalanus n.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 196.

East of Natal rare, south of the Cape Colony abundant in 37-74 m.

## GEN. PARACALANUS, Boeck.

1865. *Paracalanus*, Boeck, Vid. Selsk. Forh. Christian., 1864, vol. vii., p. 232 (8).

## \* PARACALANUS PARVUS (Claus).

1863. *Calanus parvus*, Claus, Freileb. Copepoden, p. 173, pl. 26, figs. 10-14, pl. 27, figs. 1-4.

1865. *Paracalanus p.*, Boeck, Vid. Selsk. Forh. Christian., p. 233 (9).

1898. *P. p.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 24.

1903. *P. p.*, Sars, Crustacea of Norway, vol. iv., p. 17, pls. 8, 9.

1904. *P. p.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 194.

South of the Cape Colony.

## \* PARACALANUS ACULEATUS, Giesbrecht.

1888. *Paracalanus aculeatus*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 333.

1898. *P. a.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 24.

1904. *P. a.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 194.

South of the Cape Colony, sparingly.

## GEN. ACROCALANUS, Giesbrecht.

1888. *Acrocalanus*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 332.

## \* ACROCALANUS GRACILIS, Giesbrecht.

1888. *Acrocalanus gracilis*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 332.  
 1898. *A. g.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 25.  
 1904. *A. g.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 184.  
 Agulhas Current.

## \* ACROCALANUS GIBBER, Giesbrecht.

1888. *Acrocalanus gibber*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 332.  
 1898. *A. g.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 25.  
 1904. *A. g.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 184.  
 Agulhas Current.

## GEN. CALOCALANUS, Giesbrecht.

1888. *Calocalanus*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 333.

## \* CALOCALANUS PAVO (Dana).

1849. *Calanus pavo*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 13.  
 1892. *Calocalanus p.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 175,  
 pl. 1, fig. 13, pl. 4, fig. 15, pl. 9, figs. 3, 4, 13, 19,  
 pl. 36, figs. 43-45.  
 1904. *C. p.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 186.  
 Sparingly round South Africa.

## GEN. CLAUSOCALANUS, Giesbrecht.

1888. *Clausocalanus*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 334.  
 1898. *C.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 27.

## \* CLAUSOCALANUS ARCUICORNIS (Dana).

1849. *Calanus arcuicornis*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 12.  
 1888. *Clausocalanus a.*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 334.

1898. *C. a.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 27.  
 1904. *C. a.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 188.  
 Round South Africa.

\* *CLAUSOCALANUS FURCATUS* (Brady).

1883. *Drepanopus furcatus* (part), Brady, Challenger Copepoda, Reports, vol. viii., p. 77, pl. 4, fig. 1.  
 1892. *Clausocalanus f.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 183, pl. 36, figs. 32, 33, 35.  
 1904. *C. f.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 188.  
 Sparingly east and west of South Africa.

GEN. *ÆTIDIUS*, Brady.

1883. *Ætidius*, Brady, Challenger Copepoda, Reports, vol. viii., p. 75.  
 Since Brady derives this name from *ἀετιδέε*—an eaglet—he ought to have written it, as was subsequently but unlawfully done in Das Tierreich, *Aetideus*. As will be seen, it has received three other forms, all incorrect as well as unlawful.  
 1892. *Ætidius*, Giesbrecht, F. u. Fl. Neapel, vol. xix., pp. 53, 213.  
 1898. *Aetideus*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 31.  
 1903. *Ætideus*, Sars, Crustacea of Norway, vol. iv., p. 24.  
 1904. *Aethidius*, Cleve, Mar. Invest. S. Africa, vol. iii., pp. 180, 185.

\* *ÆTIDIUS ARMATUS* (Boeck).

1872. *Pseudocalanus armatus*, Boeck, Vid. Selsk. Forhandl. Christian., p. 6.  
 1903. *Ætideus a.*, Sars, Crustacea of Norway, vol. iv., p. 25, pls. 13, 14.

In dealing with Boeck's species Sars hints at the possibility that Boeck, Brady, and Giesbrecht may have had three distinct forms in view, though he is at the same time uncertain whether the three do not all belong together.

1904. *Aethidius a.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 185.  
 Sparingly south of the Cape Colony.

\* *ÆTIDIUS GIESBRECHTI* (Cleve).

1883. *Ætidius armatus*, Brady, Challenger Copepoda, Reports, vol. viii., p. 76, pl. 19, figs. 5–16.  
 1892. *Ætidius a.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 213, 2, fig. 6, pl. 14, figs. 1–3, pl. 36, figs. 6–9.

1898. *Actideus a.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 31.  
 1904. *Aethidius giesbrechti*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 185.  
 Very rare east and west of South Africa.

## GEN. GAETANUS, Giesbrecht.

1888. *Gaetanus*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 335.  
 1898. *G.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 32.

## \* GAETANUS MILES, Giesbrecht.

1888. *Gaetanus miles*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 335.  
 1898. *G. m.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 32.  
 1904. *G. m.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 191.  
 Agulhas Current, 530 and 900 m.

## \* GAETANUS ARMIGER, Giesbrecht.

1888. *Gaetanus armiger*, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 335.  
 1898. *G. a.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 33.  
 1904. *G. a.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 191.  
 Agulhas Current and off Table Mountain.

## GEN. CHIRIDIUS, Giesbrecht.

1892. *Chiridius*, Giesbrecht, F. u. Fl. Neapel, vol. xix., pp. 54, 224.

## \* CHIRIDIUS POPPEI, Giesbrecht.

1892. *Chiridius poppei*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 224, pl. 14, figs. 14-18, pl. 36, figs. 10-12.  
 1904. *C. p.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 187.  
 Agulhas Current.

## GEN. UNDEUCHÆTA, Giesbrecht.

1888. *Undeuchæta*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 335.  
 1898. *U.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 33.

## \* UNDEUCHÆTA MAJOR, Giesbrecht.

1888. *Undeuchæta major*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 335.  
1898. *U. m.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 34.  
1904. *Undeuchæta m.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 198.  
Agulhas Current, 900 m.

## \* UNDEUCHÆTA MINOR, Giesbrecht.

With the same references as those for *U. major*, and also taken in the Agulhas Current.

## GEN. CHIRUNDINA, Giesbrecht.

1895. *Chirundina*, Giesbrecht, Bull. Mus. comp. Zoöl. Harvard, vol. xxv., p. 249.

## \* CHIRUNDINA STREETSII, Giesbrecht.

1895. *Chirundina streetsii*, Giesbrecht, Bull. Mus. Harvard, vol. xxv., p. 250, pl. 1, figs. 5-10.  
1898. *C. streetsi*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 34.  
1904. *C. s.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 187.  
Agulhas Current, 780-900 m.

## GEN. EUCHIRELLA, Giesbrecht.

1888. *Euchirella*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 336.  
1898. *E.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 34.

## \* EUCHIRELLA MESSINENSIS (Claus).

1863. *Undina messinensis*, Claus, Freileb. Copepoden, p. 187, pl. 31, figs. 8-18.  
1892. *Euchirella m.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 232, pl. 15, figs. 12, 16, 21, 24, pl. 36, figs. 14, 15, 18, 24, 25.  
1904. *E. m.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 190.  
Agulhas Current.

## \* EUCHIRELLA VENUSTA, Giesbrecht.

1888. *Euchirella venusta*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. iv., p. 336.



1892. *E. v.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 233, pl. 15,  
fig. 19, pl. 36, fig. 21.  
1904. *E. v.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 190.  
Agulhas Current, 900 m.

GEN. EUCHÆTA, Philippi.

1843. *Euchæta*, Philippi, Arch. Naturg., vol. ix., pt. 1, pp. 54, 67.  
1898. *E.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 37.

\* EUCHÆTA MARINA (Prestandrea).

1833. *Cyclops marinus*, Prestandrea, Effemeridi Sci. e Lett. Sicilia,  
vol. vi., p. 12.  
1892. *Euchæta marina*, Giesbrecht, F. u. Fl. Neapel, vol. xix.,  
p. 246, pl. 1, figs. 10, 11, and figs. in pls. 15, 16, 37.  
1904. *E. m.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 190.  
East and West of South Africa.

\* EUCHÆTA ACUTA, Giesbrecht.

1892. *Euchæta acuta*, Giesbrecht, F. u. Fl. Neapel, vol. xix.,  
p. 246, figs. in pls. 16, 37.  
1904. *E. a.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 190.  
Agulhas Current.

\* EUCHÆTA AFFINIS, Cleve.

1904. *Euchæta affinis*, Cleve, Mar. Invest. S. Africa, vol. iii.  
pp. 190, 201, pl. 3, figs. 17-19.  
Agulhas Current.

\* EUCHÆTA MEDIA, Giesbrecht.

1888. *Euchæta media*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4,  
vol. iv., p. 337.  
1898. *E. m.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 39.  
1904. *E. m.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 190.  
Agulhas Current.

\* EUCHÆTA LONGICORNIS, Giesbrecht.

1888. *Euchæta longicornis*, Giesbrecht, Atti Acc. Lincei Rend.,  
Ser. 4, vol. iv., p. 337.  
1898. *E. l.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 40.  
1904. *E. l.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 190.  
Agulhas Current.

## \* EUCHÆTA SPINOSA, Giesbrecht.

1892. *Euchæta spinosa*, Giesbrecht, F. u. Fl. Neapel, vol. xix.,  
p. 246, figs. in pls. 16, 37.  
1904. *E. s.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 190.  
South-east coast 33° S., 28° E., 71 m.

## \* EUCHÆTA TONSA, Giesbrecht.

1895. *Euchæta tonsa*, Giesbrecht, Bull. Mus. comp. Zoöl., vol. xxv.,  
p. 251, pl. 4, figs. 9, 10.  
1904. *E. t.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 190.  
Agulhas Current, 530 m.

## GEN. SCOLECITHRIX, Brady.

1883. *Scolecithrix*, Brady, Challenger Copepoda, Reports, vol. viii.,  
p. 56.

## \* SCOLECITHRIX DANÆ (Lubbock).

1856. *Undina danæ*, Lubbock, Tr. Ent. Soc. London, n. ser.,  
vol. iv., p. 15, pl. 9, figs. 6-9.  
1883. *Scolecithrix d.*, Brady, Challenger Copepoda, Reports,  
vol. viii., p. 57, pl. 17.  
1898. *S. d.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi.,  
p. 42.  
1904. *S. d.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 197.  
Off the east and west coasts.

## \* SCOLECITHRIX SECURIFRONS, Thomas Scott.

1893. *Scolecithrix securifrons*, Scott, Trans. Linn. Soc., Ser. 2,  
vol. vi., p. 47, pl. 4, figs. 40-56, pl. 5, fig. 1.  
1904. *S. s.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 197.  
Agulhas Current, 530-900 m.

## \* SCOLECITHRIX PERSECANS, Giesbrecht.

1895. *Scolecithrix persecans*, Giesbrecht, Bull. Mus. comp. Zoöl.  
vol. xxv., p. 253, pl. 3, figs. 6-12.  
1904. *S. p.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 197.  
Agulhas Current in 900 m.

## GEN. SCOLECITHRICELLA, Sars.

1903. *Scolecithricella*, Sars, Crustacea of Norway, vol. iv., p. 54.

\* *SCOLECITHRICELLA MINOR* (Brady).

1883. *Scolecithrix minor*, Brady, Challenger Copepoda, Reports, vol. viii., p. 58, pl. 16, figs. 15, 16, pl. 18, figs. 1-5.  
 1903. *Scolecithricella m.*, Sars, Crustacea of Norway, vol. iv., p. 55, pls. 37, 38.  
 1904. *S. m.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 197.  
 "Off the west coast, 250-277 m., very rare. The South African specimens were only 1.2 millim. in length; those from the Northern Atlantic 1.4 millim."

\* *SCOLECITHRICELLA NEPTUNI*, Cleve.

1904. *Scolecithricella neptuni*, Cleve, Mar. Invest. S. Africa, vol. iii., pp. 197, 206, pls. 4, 5, 6, figs. 30, 31.

GEN. *XANTHOCALANUS*, Giesbrecht.

1892. *Xanthocalanus*, Giesbrecht, F. u. Fl. Neapel., vol. xix., pp. 57, 286.  
 1898. *X.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 49.

\* *XANTHOCALANUS FRAGILIS*, Aurivillius.

1898. *Xanthocalanus fragilis*, Aurivillius, K. Svenska Vet. Ak. Handlingar, vol. xxx., No. 3, p. 32.  
 1904. *X. f.*, Cleve, Mar. Invest. S. Africa, vol. iii., pp. 198, 209, pl. 6, fig. 32.

GEN. *PHAËNNA*, Claus.

1863. *Phaënna*, Claus, Freileb. Copepoden, p. 188.  
 1898. *Phaenna*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 50.

\* *PHAËNNA SPINIFERA*, Claus.

1863. *Phaënna spinifera*, Claus, Freileb. Copepoden, p. 189, pl. 31, figs. 1-7.  
 1904. *P. s.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 194.  
 Agulhas Current, 900 m.

## FAMILY DIAPTOMIDÆ.

1897. *Diaptomidæ*, Sars, Annuaire Mus. St. Pétersb., vol. ii., p. 38.  
 1898. *Centropagidæ*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 52.

1902. *Diaptomidæ*, Stebbing, Encycl. Britannica, ed. 10, vol. xxviii., Suppl. vol. iv., p. 272.

It is convenient here to accept the family in the wide sense, calling it after the name of its earliest genus. In his Crustacea of Norway, vol. iv., 1903, Sars divides it into a large number of families, among which the names *Diaptomidæ* and *Centropagidæ* occur, each in a very restricted application.

#### GEN. DIAPTOMUS, Westwood.

1836. *Diaptomus*, Westwood, Partington's Cyclopædia Nat. Hist., art. Cyclops.  
1898. *D.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 66.

#### DIAPTOMUS ORIENTALIS, Brady.

1886. *Diaptomus orientalis*, Brady, J. Linn. Soc. London, vol. xix., p. 296, pl. 37, figs. 21-26.  
1907. *D. o.*, Brady, Annals Natal Gov. Mus., vol. i., pt. 2, p. 184.  
Frequent in gatherings from Somkele and Richmond, Natal; previously taken in Ceylon and elsewhere. Sent to Dr. Brady by Mr. James Gibson.

#### \* DIAPTOMUS CAPENSIS, Sars.

1907. *Diaptomus capensis*, Sars, Arch. Naturv. Kristian., vol. xxviii., No. 8, p. 4, pls. 1, 2, figs. 1, 2.  
Taken by Dr. Purcell from Dam at Faure, near Eerste River, Cape Division; pond in the Cape Flats, near Cape Town; small ponds on the Green Point Common; vley on the same; pond in the Karoo, at Ashton, Robertson Division.

#### \* DIAPTOMUS PURCELLI, Sars.

1907. *Diaptomus purcelli*, Sars, Arch. Naturv. Kristian., vol. xxviii., No. 8, p. 12, pl. 2, figs. 3-10.  
Taken by Dr. Purcell from Dam of Bergulut, Constantia Area; brick-pond at same; pond in the Cape Flats; all near Cape Town.

#### GEN. PARADIAPTOMUS, Sars.

1846. *Broteas* (preocc.), Lovén, K. Vet. Ak. Handlingar för År 1845 (vol. dated 1847), p. 436.  
Schmeil gives the preoccupying name as "*Brotheas* (corr. *Broteas*), C. L. Koch (1839, Hahn & Koch, Die Arachniden,

v. 4, p. 109).” He does not say when or by whom the correction was made.

1895. *Paradiaptomus*, Sars, Vid. Selsk. Skrifter, No. 8, p. 45.  
 1898. *P.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 95.  
 1898. *Lovénula*, Schmeil, Das Tierreich, vol. vi., p. 105.  
 1899. *Broteas*, Sars, Arch. Naturv., vol. xxi., No. 2, p. 3.  
 1903. *Paradiaptomus*, Sars, Crustacea of Norway, vol. iv., p. 84, footnote.

\* *PARADIAPTOMUS FALCIFER* (Lovén).

1846. *Broteas falcifer*, Lovén, K. Vet. Ak. Handl., p. 436, pl. 6.  
 Taken by Herr J. Wahlberg from fresh-water pools on the road from Port Natal to the brine-pans of Makkalis Mountain.  
 1889. *B. f.*, de Guerne and Richard, Mém. Soc. Zool. France, vol. ii., p. 66, figs. 41-43.

These authors speak of the species as having been found in the brine-pans, and hitherto only known in salt water. They have evidently misunderstood Lovén's account of the locality, and not noticed the heading of his paper, which states that it contains the description of “Four new species of fresh-water Crustaceans from South Africa.”

1898. *Lovénula falcifera*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 105, fig. 25.  
 1899. *Broteas falcifer*, Sars, Arch. Naturv., vol. xxi., No. 2, pp. 3, 22, pl. 4.

Specimens taken by Dr. Purcell “on Green Point Common, near Cape Town, partly from small ponds, partly from a so-called ‘vley,’ where the water must have been perfectly fresh.”

1907. *Paradiaptomus f.*, Sars, Arch. Naturv., vol. xxviii., No. 8, p. 3.

\* *PARADIAPTOMUS LAMELLATUS*, Sars.

1895. *Paradiaptomus lamellatus*, Sars, Vid. Selsk. Skr., No. 8, p. 46, pls. 7, 8.

Raised from dried mud; taken by Mr. Thesen from a swamp at Knysna, some distance east of the Cape of Good Hope.

1898. *P. l.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 96.  
 1899. *Broteas l.*, Sars, Arch. Naturv., vol. xxi., No. 2, p. 24.

Taken by Dr. Purcell from some ponds on the Green Point Common, near Capetown.



1907. *B. l.*, Brady, Annals Natal Gov. Mus., vol. i., pt. 2, p. 183.

Obtained by Mr. James Gibson at Richmond, Natal.

1907. *Paradiaptomus l.*, Sars, Arch. Naturv., vol. xxviii., No. 8, p. 3.

PARADIAPTOMUS MEUS (Gurney).

1904. *Lovenula mea*, Gurney, Proc. Zool. Soc. London, vol. ii., pt. 2, p. 300, pl. 18, figs. 7-13.

Collected by Major E. Eckersley, R.A.M.C., from a water-hole on the veld at Kroonstad, O.R.C.

GEN. CENTROPAGES, Kröyer.

1849. *Centropages*, Kröyer, Naturhist. Tidsskr., Ser. 2, vol. ii., p. 602.

\* CENTROPAGES TYPICUS, Kröyer.

1849. *Centropages typicus*, Kröyer, Naturhist. Tidsskr., Ser. 2, vol. ii., pp. 588, 603, pl. 6, figs. 22-26.

1898. *C. t.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 54, fig. 11.

1904. *C. t.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 187.  
Agulhas Current and Agulhas Bank.

\* CENTROPAGES FURCATUS (Dana).

1849. *Catopia furcata*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 25.

1892. *Centropages furcatus*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 304, figs. in pls. 17, 38.

1904. *C. f.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 187.  
Agulhas Current.

CENTROPAGES BRACHIATUS (Dana).

1849. *Pontella brachiata*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 27.

1853. *Calanopia b.*, Dana, U.S. Expl. Exp., vol. xiii., p. 1133, pl. 79, fig. 7 a, b.

"On the Lagulhas Bank, near Cape of Good Hope."

1892. *Centropages brachiatus*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 304, figs. in pls. 17, 18, 38.

1898. *C. b.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 55.

\* CENTROPAGES CHIERCHIE, Giesbrecht.

1889. *Centropages chierchia*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. v., p. 811.

1892. *C. c.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 304, figs. in pls. 17, 18, 38.

1904. *C. c.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 187.  
Round South Africa.

GEN. PSEUDODIAPTOMUS, Herrick.

1884. *Pseudodiaptomus*, Herrick, Rep. Surv. Minnesota, vol. xii., p. 181.

1898. *P.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 63.

\* PSEUDODIAPTOMUS SERRICAUDATUS (Thomas Scott).

1893. *Heterocalanus serricaudatus*, Scott, Tr. Linn. Soc., Ser. 2, vol. vi., p. 40, pl. 2, figs. 43-48, pl. 3, figs. 1-7.

1898. *Pseudodiaptomus s.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 66.

1904. *P. s.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 196.  
South of the Cape Colony, as a rule common.

GEN. TEMORA, Baird.

1850. *Temora*, Baird, Brit. Entomostraca, Ray Soc., p. 227.

\* TEMORA STYLIFERA (Dana).

1849. *Calanus stylifer*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 13.

1892. *Temora stylifera*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 328, figs. in pls. 5, 17, 38.

1904. *T. s.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 198.  
"Off Natal in the surface."

\* TEMORA DISCAUDATA, Giesbrecht.

1849. *Calanus scutellatus* (?), Dana, Pr. Amer. Ac. Sci., vol. ii., p. 13.

1889. *Temora discaudata*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. v., p. 814.

1892. *T. d.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 328, figs. in pls. 17, 38.

1904. *T. d.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 198.  
Agulhas Current.

GEN. METRIDIA, Boeck.

1865. *Metridia*, Boeck, Vid. Selsk. Forhandl. Christian., 1864, p. 13.

1898. *M.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 105.

\* METRIDIA LUCENS, Boeck.

1865. *Metridia lucens*, Boeck, Vid. Selsk. Forhandl., 1864, p. 14.  
 1898. *M. l.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 106.  
 1904. *M. l.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 192.  
 Abundant south and west of the Cape Colony.

\* METRIDIA PRINCEPS, Giesbrecht.

1889. *Metridia princeps*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. v., p. 24.  
 1892. *M. p.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 340, pl. 33, figs. 3, 18, 35, 40.  
 1904. *M. p.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 192.  
 Agulhas Current, 780 and 900 m.

\* METRIDIA VENUSTA, Giesbrecht.

1889. *Metridia venusta*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. v., p. 24.  
 1892. *M. v.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 340, pl. 33, figs. 7, 17, 29.  
 1904. *M. v.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 192.  
 Agulhas Current, 530 m.

\* METRIDIA BREVICAUDA, Giesbrecht.

1889. *Metridia brevicauda*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. v., p. 24.  
 1892. *M. b.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 340, figs. in pl. 33.  
 1904. *M. b.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 192.  
 Agulhas Current, 900 m.

GEN. PLEUROMAMMA, Giesbrecht.

1898. *Pleuromamma*, Giesbrecht, Das Tierreich, vol. vi., p. 108.

\* PLEUROMAMMA ABDOMINALIS (Lubbock).

1856. *Diaptomus abdominalis*, Lubbock, Trans. Entom. Soc. London, Ser. 2, vol. iv., p. 22, pl. 10.  
 1863. *Pleuromma abdominale*, Claus, Freileb. Copepoden, p. 197, pls. 5, 6.  
 1898. *Pleuromamma abdominalis*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 109.

1904. *P. a.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 195.  
East and west of the Cape Colony.

\* *PLEUROMAMMA GRACILIS* (Claus).

1863. *Pleuromma gracile*, Claus, Freileb. Copepoden, p. 197, pl. 5.  
1898. *Pleuromamma gracilis*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 110.  
1904. *P. g.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 195.  
Round the Cape Colony.

\* *PLEUROMAMMA XIPHIAS* (Giesbrecht).

1889. *Pleuromma xiphias*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. v., p. 25.  
1898. *Pleuromamma x.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 109.  
1904. *P. x.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 195.  
Agulhas Current, 530–900 m., off Table Mountain, 450 m.

\* *PLEUROMAMMA ROBUSTA* (F. Dahl).

1893. *Pleuromma robustum*, Dahl, Zool. Anzeiger, vol. xvi., p. 105.  
1898. *Pleuromamma robusta*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 110.  
1904. *P. r.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 195.  
East and west of the Cape Colony.

GEN. *LUCICUTIA*, Giesbrecht.

1898. *Lucicutia*, Giesbrecht, Das Tierreich, vol. vi., p. 110.

\* *LUCICUTIA FLAVICORNIS* (Claus).

1863. *Leuckartia flavicornis*, Claus, Freileb. Copepoden, p. 186, pl. 32.  
1898. *Lucicutia f.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 111.  
1904. *L. f.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 192.  
Agulhas Current, 530 and 900 m. West of the Cape Colony, 250 m.

\* *LUCICUTIA CLAUSII* (Giesbrecht).

1889. *Leuckartia clausii*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. vi., p. 812.

1898. *Lucicutia clausi*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 111.

1904. *L. clausii*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 192.  
Agulhas Current, 530 and 900 m.

\* *LUCICUTIA AURITA*, Cleve.

1904. *Lucicutia aurita*, Cleve, Mar. Invest. S. Africa, vol. iii., pp. 192, 202.

Agulhas Current, 900 m.

\* *LUCICUTIA BRADYANA*, Cleve.

1904. *Lucicutia bradyana*, Cleve, Mar. Invest. S. Africa, vol. iii., pp. 192, 204, pl. 6, figs. 33, 34.

Agulhas Current, 900 m. (? *L. grandis*, Giesb.).

GEN. *HETERORHABDUS*, Giesbrecht.

1863. *Heterochæta* (preocc.), Claus, Freileb. Copepoden, p. 180.

1892. *H.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., pp. 64, 372.

1894. *H.*, Dahl, Verhandl. Deutschen zool. Gesellschaft, p. 77.

1898. *Heterorhabdus*, Giesbrecht, Das Tierreich, vol. vi., p. 113.

\* *HETERORHABDUS SPINIFRONS* (Claus).

1863. *Heterochæta spinifrons*, Claus, Freileb. Copepoden, p. 182,  
pl. 32.

1898. *Heterorhabdus s.*, Giesbrecht and Schmeil, Das Tierreich,  
vol. vi., p. 114.

1904. *H. s.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 191.

East and west of the Cape Colony.

\* *HETERORHABDUS PAPILLIGER* (Claus).

1863. *Heterochæta papilligera*, Claus, Freileb. Copepoden, p. 182,  
pl. 32.

1898. *Heterorhabdus papilliger*, Giesbrecht and Schmeil, Das  
Tierreich, vol. vi., p. 114.

1904. *H. p.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 191.

Agulhas Current and off the West Coast.

\* *HETERORHABDUS ABYSSALIS* (Giesbrecht).

1889. *Heterochæta abyssalis*, Giesbrecht, Atti Acc. Lincei Rend.,  
Ser. 4, vol. v., p. 812.



1898. *Heterorhabdus a.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 116, fig. 26.

1904. *H. a.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 191.

Agulhas Current, 530-900 m. Off Table Mountain, 450 m.

\* *HETERORHABDUS TANNERI* (Giesbrecht).

1895. *Heterochæta tanneri*, Giesbrecht, Bull. Mus. Comp. Zoöl., vol. xxv., p. 259, pl. 4, figs. 5, 6.

1898. *Heterorhabdus t.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 115.

1904. *H. t.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 192.

Agulhas Current.

\* *HETERORHABDUS AUSTRINUS*, Giesbrecht.

1902. *Heterorhabdus austrinus*, Giesbrecht, Exp. Antarct. Belge, Copepoden, pp. 3, 28, pl. 6, figs. 1-9.

1904. *H. a.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 191.

Agulhas Current, 530-780 m.

GEN. *AUGAPTILUS*, Giesbrecht.

1889. *Augaptilus*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. v., p. 813.

1898. *A.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 120.

\* *AUGAPTILUS PALUMBII*, Giesbrecht.

1889. *Augaptilus palumbii*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. v., p. 813.

1899. *A. palumboi*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 122.

1904. *A. p.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 185.

Agulhas Current.

GEN. *PHYLLOPUS*, Brady.

1883. *Phyllopus*, Brady, Challenger Copepoda, Reports, vol. viii., p. 78.

\* *PHYLLOPUS BIDENTATUS*, Brady.

1883. *Phyllopus bidentatus*, Brady, Challenger Copepoda, Reports, vol. viii., p. 78, pl. 5, figs. 7-16.

1898. *P. b.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 124.

1904. *P. b.*, Cleve, Mar. Invest. S. Africa, vol. iii. p. 194.

Agulhas Current, 900 m.

FAMILY CANDACIIDÆ.

1892. *Candacida*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 67.  
 1898. *Candaciida*, Giesbrecht and Schmeil, Das Tierreich, vol. vi.,  
 p. 126.

GEN. CANDACIA, Dana.

1846. *Candacia*, Dana, Ann. Nat. Hist., vol. xviii., p. 184.  
 1898. *C.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 126.

\* CANDACIA PACHYDACTYLA (Dana).

1849. *Candace pachydactyla*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 23.  
 1898. *Candacia p.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi.,  
 p. 128.  
 1904. *C. p.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 187.  
 East and west of the Cape Colony.

\* CANDACIA CURTA (Dana).

1849. *Candace curta*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 23.  
 1898. *Candacia c.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi.,  
 p. 129.  
 1904. *C. c.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 186.  
 Agulhas Current.

\* CANDACIA TRUNCATA (Dana).

1849. *Candace truncata*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 24.  
 1898. *Candacia t.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi.,  
 p. 130.  
 1904. *C. t.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 187.  
 Agulhas Current.

\* CANDACIA BIPINNATA (Giesbrecht).

1883. *Candace truncata* (part) ?, Brady, Challenger Copepoda,  
 Reports, vol. viii., p. 69.  
 1899. *C. bipinnata*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. v.,  
 p. 815.  
 1898. *Candacia b.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi.,  
 p. 129.  
 1904. *C. b.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 186.  
 Common south of the Cape Colony.

## \* CANDACIA CATULA (Giesbrecht).

1883. *Candace truncata* (part) ?, Brady, Challenger Copepoda, Reports, vol. viii., p. 69.  
1889. *C. catula*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. v., p. 815.  
1898. *Candacia c.*, Giesbrecht and Schmeil, Das Tierreich, vol. v., p. 129.  
1904. *C. c.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 186.  
Agulhas Current.

## \* CANDACIA TENUIMANA (Giesbrecht).

1889. *Candace tenuimana*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. v., p. 814.  
1898. *Candacia t.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 128.  
1904. *C. t.*, Cleve, Mar. Invest. S. Africa, vol. viii., p. 187.  
Agulhas Current.

## \* CANDACIA VARICANS (Giesbrecht).

1892. *Candace varicans*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 424, figs. in pls. 21, 22, 39.  
1898. *Candacia v.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 129.  
1904. *C. v.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 187.  
Agulhas Current, 900 m.

## \* CANDACIA CHIRURA, Cleve.

1904. *Candacia chirura*, Cleve, Mar. Invest. S. Africa, vol. iii., pp. 186, 210 (*C. cheirura*, p. 198), pl. 1, pl. 2, figs. 7-10.  
West of South Africa, 250-350 m., sparingly.

## \* CANDACIA INERMIS, Cleve.

1904. *Candacia inermis*, Cleve, Mar. Invest. S. Africa, vol. iii., pp. 187, 200, 210, pl. 2, figs. 11-13, pl. 3, figs. 14-16.  
Agulhas Current, 530 m.

## FAMILY PONTELLIDÆ.

1892. *Pontellidæ*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 68.

## GEN. PONTELLA, Dana.

1846. *Pontella* (part), Dana, Ann. Nat. Hist., vol. xviii., p. 184.  
1898. *P.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 139.

## \* PONTELLA SECURIFER, Brady.

1883. *Pontella securifer*, Brady, Challenger Copepoda, Reports, vol. viii., p. 96, pl. 45, figs. 1-9.  
1898. *P. s.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 142.  
1904. *P. s.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 195.  
Agulhas Current.

## GEN. PONTELLINA, Dana.

1853. *Pontellina* (part), Dana, U.S. Expl. Exp., vol. xiii., pp. 1131, 1135.  
1898. *P.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 149.

## \* PONTELLINA PLUMATA (Dana).

1849. *Pontella plumata*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 27.  
1849. *P. turgida*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 28.  
1853. *Pontellina plumata*, Dana, U.S. Expl. Exp., vol. xiii., p. 1135, pl. 79, fig. 10 *a-d*.  
1853. *P. turgida*, Dana, U.S. Expl. Exp., vol. xiii., p. 1136, pl. 79, figs. 11 *a, b*, 12 *a, b*.  
"On the Lagulhas Bank, off Cape of Good Hope." "The specimen collected on the Lagulhas Bank is represented in figures 12 *a, b*."  
1898. *P. plumata*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 149.  
1904. *P. p.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 195.  
Agulhas Current.

## GEN. PONTELLOPSIS, Brady.

1883. *Pontellopsis*, Brady, Challenger Copepoda, Reports, vol. viii., pp. 85, 86.  
1898. *P.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 145.

## PONTELLOPSIS CURTA (Dana).

1849. *Pontella curta*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 28.

1853. *Pontellina c.*, Dana, U.S. Expl. Exp., vol. xiii., p. 1138, pl. 80, fig. 1 *a*, *b*.

“On the Lagulhas Bank.”

1898. *Pontellopsis c.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 149.

PONTELLOPSIS EMERITA (Dana).

1849. *Pontella emerita*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 31.  
 1853. *Pontellina c.*, Dana, U.S. Expl. Exp., vol. xiii., p. 1153, pl. 80, fig. 14 *a*, *b*.  
 Collected off the Cape of Good Hope, lat. 35° 20' S., long. 20° E.

GEN. ACARTIA, Dana.

1846. *Acartia*, Dana, Ann. Nat. Hist., vol. xviii., p. 183.  
 1898. *A.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 150.

\* ACARTIA DANÆ, Giesbrecht.

1889. *Acartia danæ*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. v., p. 26.  
 1898. *A. d.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 154.  
 1904. *A. d.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 184.

GEN. LABIDOCERA, Lubbock.

1853. *Labidocera*, Lubbock, Ann. Nat. Hist., Ser. 2, vol. xi., pp. 203, 208.  
 1898. *L.*, Giesbrecht and Schmeil, Das Tierreich, vol. vi., p. 132.

\* LABIDOCERA ACUTA (Dana).

1849. *Pontella acuta*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 30.  
 1889. *Labidocera acutum*, Giesbrecht, Atti Acc. Lincei Rend., Ser. 4, vol. v., p. 27.  
 1898. *L. acuta*, Giesbrecht and Schmeil, Das. Tierreich, vol. vi., p. 134.  
 1904. *L. a.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 191.  
 Agulhas Current.

TRIBE ARPACTICIDEA.

1903. *Harpacticoida*, Sars, Crustacea of Norway, vol. v.  
 As the tribal name is based on the genus *Arpacticus*, Milne-



Edwards (Hist. Nat. Crust., vol. iii., p. 430), 1840, it should, in my opinion, be modified as above. At this point the classification turns from the Gymnoplea of Giesbrecht to his Podoplea, of which I have given a summary in the Encyclopædia Britannica, ed. 10, Suppl. vol. iv., art, Entomostraca, 1902. The difficulty of so defining the group that it may fittingly embrace all the remaining families of the Copepoda, has led authors to prefer the arrangement proposed by Sars in his Crustacea of Norway, vol. iv., pt. 1, 1901, although at present only two of his seven divisions, the Calanoida and Harpacticoida, have been worked out, each occupying a splendidly illustrated volume.

1910. H., C. B. Wilson, Zool. Anzeiger, vol. xxxv., No. 20 (April), p. 619.  
 1910. H., R. W. Sharpe, Proc. U.S. Nat. Mus., vol. xxxviii. (August), pp. 405, 425; (*Podoplea*), pp. 407, 415.

### FAMILY ARPACTICIDÆ.

1892. *Harpacticidæ*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 78.

#### GEN. SETELLA, Dana.

1846. *Setella*, Dana, Amer. J. Sci., Ser. 2, vol. i., p. 227.  
 1853. S., Dana, U.S. Expl. Exp., vol. xiii., pp. 1179, 1195.  
 1892. S., Giesbrecht, F. u. Fl. Neapel, vol. xix., pp. 79, 559.

Giesbrecht suggests a family or sub-family Setellidæ for this genus. Sars would apparently include it in his family Ectinosomidæ (preferably Ectinosomatidæ).

#### SETELLA GRACILIS, Dana.

1853. *Setella gracilis*, Dana, U.S. Expl. Exp., vol. xiii., p. 1198, pl. 84, fig. 3 a-g.  
 1910. S. g., Brady, Deutsche südpol. Exp., vol. xi. (Zool. iii.), p. 508, pl. 52, fig. 5, fig. 3 in text.  
 Sparingly at Port Natal on the surface.

#### GEN. ÆGISTHUS, Giesbrecht.

1891. *Ægisthus*, Giesbrecht, Atti Acc. Lincei Rend., vol. vii., p. 476.

\* *ÆGISTHUS MUCRONATUS*, Giesbrecht.

1891. *Ægisthus mucronatus*, Giesbrecht, Atti Acc. Lincei Rend., vol. vii., p. 476.  
 1892. *A. m.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 573, figs. in pls. 46, 49.  
 1904. *A. m.*, Cleve, Mar. Invest. S. Africa, vol. viii., p. 185. Agulhas Current.

\* *ÆGISTHUS ACULEATUS*, Giesbrecht.

1891. *Ægisthus aculeatus*, Giesbrecht, Atti Acc. Lincei Rend., vol. vii., p. 476.  
 1892. *A. a.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 573, figs. in pls. 46, 49.  
 1904. *A. a.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 185. Agulhas Current.

## FAMILY PORCELLIDIIDÆ.

1904. *Porcellidiidæ*, Sars, Crustacea of Norway, vol. v., p. 74.

## GEN. PORCELLIDIUM, Claus.

1860. *Porcellidium*, Claus, Beiträge zur Kenntniss der Entomostraken, p. 6.

## PORCELLIDIUM WOLFENDENI, Brady.

1910. *Porcellidium wolfendeni*, Brady, Deutsche südpol. Exp., vol. xi. (Zool. iii.), p. 556, fig. 44 in text.  
 Dredged in Simon's Bay, Cape of Good Hope.

## FAMILY TISBIDÆ.

1904. *Idyidæ*, Sars, Crustacea of Norway, vol. v., pt. 6, p. 78.

The necessity for a change in the family name will be seen from the references for the leading genus.

## GEN. TISBE, Liljeborg.

1834. *Idya* (preocc.), Philippi, Arch. Naturg., vol. ix., pt. 1, p. 58.  
 1853. *Tisbe*, Liljeborg, Clad. Ostrac. et Copepoda in Scania.  
 1905. *Idya*, Sars, Crustacea of Norway, vol. v., pt. 7, p. 87.  
 1906. *Tisbe*, Norman and Scott, Crust. Devon and Cornwall, p. 183.  
 1910. *Idyæa*, Sars, Crustacea of Norway, vol. v., pt. 30, p. 367.

## TISBE TENUIMANA (Giesbrecht).

1902. *Idya tenuimana*, Giesbrecht, Exp. Antarct. Belge, Copepoden, p. 38, pl. 11, figs. 8-13.  
1910. *Tisbe t.*, Brady, Deutsche südpol. Exp., vol. xi. (Zool. iii.), p. 560, pl. 54, fig. 2, fig. 47 in text.  
Taken in Simon's Bay, at the Cape of Good Hope.

## FAMILY THALESTRIDÆ.

1905. *Thalestridæ*, Sars, Crustacea of Norway, vol. v., pt. 8, p. 102.

## GEN. RHYNCHOTHALESTRIS, Sars.

1905. *Rhynchothalestris*, Sars, Crustacea of Norway, vol. v., pt. 9, p. 119.

## RHYNCHOTHALESTRIS VANHÖFFENI, Brady.

1910. *Rhynchothalestris vanhoeffeni*, Brady, Deutsche südpol. Exp., vol. xi. (Zool. iii.), p. 532, fig. 23 in text.  
A mutilated specimen from Simon's Bay, Cape of Good Hope.

## MEGARTHURUM, Norman and Scott.

1906. *Megarthurum*, Norman and Scott, Crust. Devon and Cornwall, p. 174.

## MEGARTHURUM SIMULANS, Brady.

1910. *Megarthurum simulans*, Brady, Deutsche südpol. Exp., vol. xi., (Zool. iii.), p. 544, pl. 54, figs. 9, 10, fig. 35 in text.

## GEN. IDOMENE, Philippi.

1843. *Idomene*, Philippi, Arch. Naturg., vol. ix., pt. 2, p. 64.  
1906. *I.*, Sars, Crustacea of Norway, vol. v., pt. 11, p. 133.

## IDOMENE AUSTRALIS, Brady.

1910. *Idomene australis*, Brady, Deutsche südpol. Exp., vol. xi. (Zool. iii.), p. 543, fig. 34 in text.  
Simon's Bay, Cape of Good Hope.

## FAMILY CANTHOCAMPIDÆ.

1878. *Canthocamptiinae* (part), Brady, British Copepoda, Ray Soc., vol. i., p. 31.  
 1902. *Canthocamptinae*, Stebbing, Encycl. Brit., ed. 10, Suppl. vol. iv., p. 273.  
 1906. *Canthocamptidæ*, Sars, Crustacea of Norway, vol. v., pt. 16, p. 193.

Since the premier genus is *Canthocampus* (not *Canthocampus*), Westwood, 1836, the spelling of the family name should be arranged to correspond.

## GEN. ATTHEYELLA, Brady.

1880. *Attheyella*, Brady, British Copepoda, Ray Soc., vol. ii., p. 58 (name without definition in vol. i., p. 31, 1878).  
 1907. *A.*, Sars, Crustacea of Norway, vol. v., pt. 17, p. 199.

## ATTHEYELLA NATALIS, Brady.

1904. *Attheyella natalis*, Brady, Proc. Zool. Soc., vol. ii., p. 124, pl. 7, figs. 28-33.

Sent by Mr. James Gibson, from fresh-water pool near Greytown, Natal.

## FAMILY LAOPHONTIDÆ.

1907. *Laophontidæ*, Sars, Crustacea of Norway, vol. v., pt. 20, p. 234.  
 1908. *L.*, Thomas Scott, 25th Ann. Rep. Fishery Scotland, for 1906, pt. 3, p. 209.

Dr. Scott here attributes the family to Professor Sars, who in 1907 speaks of the family as recently established by Th. Scott.

## GEN. LAOPHONTE, Philippi.

1840. *Laophonte*, Philippi, Arch. Naturg., vol. vi., p. 189.

## LAOPHONTE CORNUTA, Philippi.

1840. *Laophonte cornuta*, Philippi, Arch. Naturg., vol. vi., p. 189, pl. 3, fig. 13.  
 1907. *L. c.*, Sars, Crustacea of Norway, vol. v., pt. 20, p. 235, pls. 157, 158.

1910. *L. c.*, Brady, Deutsche südpol. Exp., vol. xi. (Zool. iii.), p. 523, pl. 57, fig. 1, fig. 15 in text.

At Simon's Town, showing some small differences from the European form.

## TRIBE CYCLOPIDEA.

1903. *Cyclopoida*, Sars, Crustacea of Norway, vol. v., pt. 1, p. 2.

## FAMILY CYCLOPIDÆ.

1878. *Cyclopida*, Brady, British Copepoda, Ray Soc., vol. i., p. 21.  
1900. "*Copepoden*," Giesbrecht, Mittheilungen aus der Zool. Station zu Neapel, vol. xiv., pt. 1, p. 39. At p. 78 numerous bibliographical references are supplied.

## GEN. CYCLOPS, O. F. Müller.

1776. *Cyclops*, Müller, Zool. Dan. Prodr., pp. xxvii., 200.  
1878. *C.*, Brady, British Copepoda, Ray Soc., vol. i., p. 97.

## CYCLOPS FIMBRIATUS, Fischer.

1853. *Cyclops fimbriatus*, Fischer, Bull. Soc. Imp. Moscou, p. 94, pl. 3, figs. 19-28, 30.  
1891. *C. f.*, Brady, Trans. Nat. Hist. Northumb. and Durham, vol. xi., pt. i., p. 90 (25), pl. 9, fig. 1.

This paper supplies the bibliography of the species, which some authors refer to *Cyclops crassicornis*, O. F. Müller, 1785.

1904. *C. f.*, Brady, Proc. Zool. Soc., p. 123. Greytown, Natal, from Mr. Gibson.

## CYCLOPS LEUCKARTI, Claus.

1904. *Cyclops leuckarti*, Brady, Proc. Zool. Soc., p. 122.

Greytown, Natal, from Mr. Gibson. Dr. Brady seems inclined to think that this species belongs to his *Cyclops scourfieldi* (Tr. N. H. Northumberland, vol. xi., pt. 1, p. 75 (10), pl. 4, pl. 6, figs. 6-8), which he identified with *C. leuckartii*, Sars (not *C. leuckarti*, Claus). Scourfield, Schmeil, Herrick favour the identification with Claus' species



of which Thomas Scott gives an account, as *C. leuckarti*, in 15th Ann. Rep. Fishery Scotland, pt. 3, p. 322, pl. 9, figs. 23-25, 1897.

CYCLOPS PUSILLUS, Brady.

1904. *Cyclops pusillus*, Brady, Proc. Zool. Soc., p. 122, pl. 6, figs. 11-18.

Greytown, Natal, from Mr. Gibson.

CYCLOPS GIBSONI, Brady.

1904. *Cyclops gibsoni*, Brady, Proc. Zool. Soc., p. 123, pl. 6, figs. 1-10.

Greytown, Natal, from Mr. Gibson.

CYCLOPS HYALINUS, Rehberg.

1880. *Cyclops hyalinus*, Rehberg, Freileb. Süßwasser-Copepoden, Abhandl. Naturw. Verein, Bremen, vol. vi.

1903. *C. h.*, Sars, Arch. Naturv. Kristian., vol. xxv., No. 8, p. 19.

"Cape of Good Hope (coll. of Dr. Purcell)." Sars remarks: "Dr. Schmeil regards this form as only a variety of *C. oithonoides* G. O. Sars. In this view I am by no means prepared to consent. It seems to me to be in reality a well defined species."

It may here be noticed that Mr. D. J. Scourfield (Essex Naturalist, vol. x., p. 324, 1898) under "*Cyclops oithonoides*, Sars," writes as follows: "In the 'Nachtrag' (Bibliotheca Zoologica, Heft xxi, 1897) Schmeil says that specimens of *C. scourfieldi* var. sent to him by Prof. Brady proved to be *C. oithonoides* var. *hyalina*."

GEN. ECTOCYCLOPS, Brady.

1904. *Ectocyclops*, Brady, Proc. Zool. Soc., p. 124.

ECTOCYCLOPS RUBESCENS, Brady.

1904. *Ectocyclops rubescens*, Brady, Proc. Zool. Soc., p. 124, pl. 6, figs. 19, 20, pl. 7, figs. 21-27.

Greytown, Natal, from Mr. Gibson.

GEN. OITHONA, Baird.

1843. *Oithona*, Baird, Zoologist, vol. i., p. 59.

1892. *O.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., pp. 77, 537.

## \* OITHONA PLUMIFERA, Baird.

1843. *Oithona plumifera*, Baird, Zoologist, vol. i., p. 59.  
1892. *O. p.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., pp. 537, 754,  
figs. on pls. 4, 34, 44.  
Giesbrecht considers that *O. challenger*i, Brady, Chall. Rep.,  
p. 97, pl. 40, figs. 1-10, confuses *O. plumifera*, Baird, and  
*O. setigera*, Dana. One of the stations was lat. 32° 24' S., long.  
13° 5' W. But which species was taken there is doubtful.  
1904. *O. p.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 193.  
"E. and W., of the Cape Colony. False Bay."

## OITHONA SPLENDENS, Baird.

1843. *Oithona splendens*, Baird, Zoologist, vol. i., p. 61.  
Off Cape of Good Hope, lat. 36° S., long. 10° E.

## \* OITHONA SIMILIS, Claus.

1866. *Oithona similis*, Claus, Schrift. Ges. Naturw. Marburg, Suppl.  
pt. 1, p. 14.  
1892. *O. s.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., pp. 537, 539, figs.  
on pls. 34, 44.  
1904. *O. s.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 193.  
"South of the Cape Colony, sparingly."

## \* OITHONA RIGIDA, Giesbrecht.

1896. *Oithona rigida*, Giesbrecht, Zool. Jahrb., vol. ix., p. 324.  
1901. *O. r.*, Cleve, K. Svenska Vet. Ak. Handl., vol. xxxv., No. 5,  
p. 45, pl. 5, figs. 7-18.  
1904. *O. r.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 195.  
Agulhas Current, 97 m.  
1905. *O. r.*, Wolfenden, Copepoda, in Gardiner's Fauna Mald. and  
Lacc. Arch., vol. ii., Suppl. 1, p. 1023, pl. 99, fig. 42.

## \* OITHONA NANA, Giesbrecht.

1892. *Oithona nana*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 538,  
figs. in pls. 4, 34, 44.  
1904. *O. n.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 192.  
South of the Cape Colony.

## TRIBE NOTODELPHYIDEA.

1903. *Notodelphyoida*, Sars, Crustacea of Norway, vol. iv., p. 2.

## FAMILY ASCIDICOLIDÆ.

1892. *Ascidicolida*, Canu, Les Copépodes du Boulonnais, p. 186.

## GEN. ZANCLOPUS, Calman.

1908. *Zanclopus*, Calman, Trans. S. African Phil. Soc., vol. xvii., pt. 2, p. 178.

## \* ZANCLOPUS CEPHALODISCI, Calman.

1908. *Zanclopus cephalodisci*, Calman, Trans. S. African Phil. Soc., vol. xvii., pt. 2, p. 178, pl. 18, figs. 1-8.

"The parasite dealt with in this paper was discovered by Dr. W. G. Ridewood in the course of his investigation of *Cephalodiscus gilchristi* from the Cape Seas, and is briefly referred to in his memoir on that species (Mar. Invest. S. Africa, iv., p. 181)."

## GEN. GUNENOTOPHORUS, Costa.

? 1840. *Gunenotophorus*, Costa, Fauna del Regno di Napoli, Catalogo de' Crostacei, p. 7.

Among the Entomostraci Pecilopodi of this undated Catalogue, following a Preface dated 1838, there is included the new species *Gunenotophorus globularis*, but in my collection of Costa's Crostacei there is no definition of either the genus or the species.

## \* GUNENOTOPHORUS GLOBULARIS, Costa.

1892. *Gunenotophorus globularis*, Canu, Les Copépodes du Boulonnais, p. 200, pl. 11, figs. 1-12.

In Canu's synonymy the reference following that to Costa is to *Sphæronotus thorelli*, Claus, 1864. If Costa's designation is a *nomen nudum*, the species should be called *thorelli*.

1900 *G. (?) g.*, Thomas Scott, 18th Ann. Rep. Fishery Scotland, pt. 3, p. 387, pl. 13, figs. 28-34, pl. 14, figs. 37, 38.

1910. *G. g.*, Stebbing, S.A. Crustacea, pt. 5.

No. 164, sent by Dr. Gilchrist, taken on "Red Bait" in False Bay.

At this point the division of the Copepoda into Tribes is mystified, as neither Sars nor Giesbrecht, our leading authorities, has yet carried out his system fully to a practical application. Quite

recently C. B. Wilson, while bestowing richly deserved praise on the work of Professor Sars, says that it would be discourteous to try and carry his classification further, in advance of its author's own progress. Yet surely no higher tribute could be paid to a principle of action than successful results produced by adopting it. This indeed would seem to be Mr. Wilson's own feeling, since he immediately makes the attempt which he had just deprecated. He suggests that the Cyclopoida should contain the Chondracanthidæ in addition to the Corycæidæ, Lichomolgidæ and Ergasilidæ, that the Caligoida should contain the Lernæidæ in addition to the Caligidæ and Dichelestiidæ, while leaving to the Lernæoida the Lernæopodidæ and other indistinct possibilities. The present Catalogue must here content itself with accepted families to be hereafter allotted to appropriate tribes.

### FAMILY SAPPHIRINIDÆ.

1853. *Corycæidæ*, Dana, U.S. Expl. Exp., vol. xiii., p. 1201.

1892. *C.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 83.

1910. *Sapphirinidæ*, Stebbing, S.A. Crustacea, pt. 5.

As in this family *Sapphirina* is a much older genus than *Corycæus*, the name of the family should be founded upon it. It has the sanction of Thorell's work in 1859.

### GEN. SAPPHIRINA, J. V. Thompson.

1829. *Sapphirina*, Thompson, Zoological Researches, vol. i., Mem. 3.

1892. *S.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 618.

### SAPPHIRINA INDICATOR, J. V. Thompson.

1829. *Sapphirina indicator*, Thompson, Zoological Researches, vol. i., Mem. 3, p. 47, pl. 8, fig. 2.

Near the Cape of Good Hope.

1853. *S. i.*, Dana, U.S. Expl. Exp., vol. xiii., pp. 1203, 1238, 1254.

Dana and Giesbrecht regard the species as beyond certain recognition.

### SAPPHIRINA FULGENS, Templeton.

?1802. *Oniscus fulgens*, Tilesius, Neue Ann. Watterausch, vol. i., p. 10, pl. 213, fig. 24 (Templeton).

1836. *Sapphirina f.*, Templeton, Trans. Ent. Soc. London, vol. i., pt. 3, p. 194, pl. 21, fig. 8.

"It was found in great numbers in calm weather off the southern peninsula of Africa." Templeton assigns the species to Tilesius, and regards Thompson's *S. indicator* as synonymous. All three accounts have been regarded by later authors as insufficient for specific determination. *Cyclops laticauda*, Templeton, *loc. cit.*, p. 195, pl. 21, fig. 10 *a, b*, also abundant off the Cape, is mentioned by Giesbrecht as another indeterminate *Sapphirina*.

\* SAPPHIRINA GEMMA, Dana.

1849. *Sapphirina gemma*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 44.  
 1853. *S. g.*, Dana, U.S. Expl. Exp., vol. xiii., p. 1252, pl. 88, figs. 1 *a-f*, 2 *a-g*.  
 "Lagulhas Bank, south of Cape of Good Hope." "This species may possibly be the *Sapphirina indicator*."  
 1892. *S. g.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 618, figs. on pls. 3, 52-54.  
 1904. *S. g.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 196.  
 Agulhas Current.

\* SAPPHIRINA ANGUSTA, Dana.

1849. *Sapphirina angusta*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 41.  
 1853. *S. a.*, Dana, U.S. Expl. Exp., vol. xiii., p. 1240, pl. 87, fig. 3 *a, b*.  
 On the Lagulhas Bank, lat. 35° 50' S., long. 23° E.  
 1892. *S. a.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 619, figs. on pls. 52-54.  
 1904. *S. a.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 196.  
 Off the west coast in 277 m.

\* SAPPHIRINA OPALINA, Dana.

1849. *Sapphirina opalina*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 45.  
 1853. *S. o.*, Dana, U.S. Expl. Exp., vol. xiii., p. 1254, pl. 88, fig. 4 *a-i, k-l*.  
 1892. *S. o.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 620, figs. on pls. 52-54.  
 1904. *S. o.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 196.  
 Agulhas Current.

\* SAPPHIRINA SALPÆ, Claus.

1859. *Sapphirina salpæ*, Claus, Arch. Anat. Physiol. Wiss. Med., pl. 5.



1892. *S. s.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 618, figs. on pls. 2, 52-54.

Giesbrecht offers *S. iris*, Dana, 1849, and *S. scalaris*, Fischer, 1860, as possible synonyms.

1904. *S. s.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 197.

"Off Table Mountain, 450 m."

\* SAPPHIRINA NIGROMACULATA, Claus.

1863. *Sapphirina nigromaculata*, Claus, Freileb. Copepoden, p. 152, pl. 8.

1892. *S. n.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 619, figs. on pls. 52-54.

1904. *S. n.*, Cleve, Mar. Invest. S. Africa, p. 196.

Agulhas Current.

\* SAPPHIRINA SINUCAUDA, Brady.

1833. *Sapphirina sinuicauda*, Brady, Challenger Copepoda, Reports, vol. viii., p. 129, pl. 49, figs. 7-10.

1892. *S. s.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 620, figs. on pls. 52-54.

1904. *S. s.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 197.

"Off Natal, surface; off Table Mountain, 450 m."

\* SAPPHIRINA SCARLATA, Giesbrecht.

1891. *Sapphirina scarlata*, Giesbrecht, Atti Acc. Lincei Rend., vol. vii., p. 478.

1892. *S. s.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 620, figs. on pls. 52-54.

1904. *S. s.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 197.

Off the west coast, 350 m.

GEN. CORYCÆUS, Dana.

1845. *Corycæus*, Dana, Pr. Ac. Sci. Philad., vol. ii., p. 285.

1892. *C.*, Giesbrecht, F. u. Fl. Neapel, vol. xiii., p. 85, 659.

\* CORYCÆUS SPECIOSUS, Dana.

1849. *Corycæus speciosus*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 38.

1892. *C. s.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 660, figs. on pl. 51.

1904. *C. s.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 189.

Agulhas Current.

## CORYCÆUS PELLUCIDUS, Dana.

1849. *Corycæus pellucidus*, Dana, Pr. Amer. Ac. Sci., vol. ii., p. 38.  
 1853. *C. p.*, Dana, U.S. Expl. Exp., vol. xiii., p. 1224, pl. 86, fig. 6 a-d.  
 1910. *C. p.*, Brady, Deutsche südpol. Exp., vol. xi. (Zool. iii.), p. 571, fig. 57 in text.

Port Natal, on the surface. Giesbrecht regards this species as doubtful, but Brady upholds it, and suggests that *Corycæus rostratus*, Claus, is a synonym.

## \* CORYCÆUS FURCIFER, Claus.

1863. *Corycæus furcifer*, Claus, Freileb. Copepoden, p. 157, pl. 24.  
 1892. *C. f.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 660, figs. on pls. 49, 51.  
 1904. *C. f.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 188.  
 Agulhas Current and West of South Africa.

## \* CORYCÆUS OVALIS, Claus.

1863. *Corycæus ovalis*, Claus, Freileb. Copepoden, p. 158.  
 1892. *C. o.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 659, figs. on pl. 49, and pl. 51, figs. 1-3.  
 1904. *C. o.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 188.  
 Agulhas Bank and West of South Africa.

## \* CORYCÆUS ROBUSTUS, Giesbrecht.

1891. *Corycæus robustus*, Giesbrecht, Atti Acc. Lincei Rend., vol. vii., p. 480.  
 1892. *C. r.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 660, figs. on pl. 51.  
 1904. *C. r.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 188.  
 Agulhas Current.

## \* CORYCÆUS DANÆ, Giesbrecht.

1891. *Corycæus danæ*, Giesbrecht, Atti Acc. Lincei Rend., vol. vii., p. 480.  
 1892. *C. d.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 660, figs. on pl. 51.  
 1904. *C. d.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 188.  
 Sparingly east and west.

## FAMILY ONCÆIDÆ.

1892. *Oncæidæ*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 81.

## GEN. ONCÆA, Philippi.

1843. *Oncæa*, Philippi, Arch. Naturg., vol. ix., p. 62.  
1892. *O.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 590.

## \* ONCÆA VENUSTA, Philippi.

1843. *Oncæa venusta*, Philippi, Arch. Naturg., vol. ix., p. 62, pl. 4.  
1892. *O. v.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 590, figs. on  
pl. 47.  
1904. *O. v.*, Cleve, Mar. Invest. S. Africa, p. 194.  
Round the Cape Colony.

## \* ONCÆA MEDITERRANEA (Claus).

1863. *Antaria mediterranea*, Claus, Freileb. Copepoden, p. 159,  
pl. 30.  
1891. *Oncæa m.*, Giesbrecht, Atti Acc. Lincei Rend., vol. vii.,  
p. 477.  
1904. *O. m.*, Cleve, Mar. Invest. S. Africa, p. 193.  
Round the Cape Colony, sparingly.

## \* ONCÆA MEDIA, Giesbrecht.

1891. *Oncæa media*, Giesbrecht, Atti Acc. Lincei Rend., vol. vii.,  
p. 477.  
1904. *O. m.*, Mar. Invest. S. Africa, vol. iii., p. 193.  
Agulhas Current and off Table Mountain.

## \* ONCÆA CONIFERA, Giesbrecht.

1891. *Oncæa conifera*, Giesbrecht, Atti Acc. Lincei Rend., vol. vii.,  
p. 477.  
1904. *O. c.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 193.  
Sparingly round the Cape Colony.

## \* ONCÆA SUBTILIS, Giesbrecht.

1892. *Oncæa subtilis*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 591,  
figs. on pl. 47.  
1904. *O. s.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 194.  
South of the Cape Colony.

## GEN. PACHOS, n.n.

1863. *Pachysoma*, Claus, Freileb. Copepoden, p. 162.  
 1892. *P.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., pp. 82, 612.  
 1910. *Pachos*, Stebbing, S.A. Crustacea, pt. 5.

The new name, *Pachos*, from the neuter noun πάχος, thickness, is here introduced in place of the much-pre-occupied *Pachysoma*.

## \* PACHOS TUBEROSUM (Giesbrecht).

1891. *Pachysoma tuberosum*, Giesbrecht, Atti Acc. Lincei Rend., vol. vii., p. 478.  
 1892. *P. t.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 612, pl. 48, fig. 37.  
 1904. *P. t.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 194.  
     Agulhas Current, 900 m.  
 1910. *Pachos t.*, Stebbing, S.A. Crustacea, pt. 5.

## GEN. LUBBOCKIA, Claus.

1863. *Lubbockia*, Claus, Freileb. Copepoden, p. 163.  
 1892. *L.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., pp. 82, 606.

## LUBBOCKIA ACULEATA, Giesbrecht.

1891. *Lubbockia aculeata*, Giesbrecht, Atti Acc. Lincei Rend., vol. vii., p. 477.  
 1892. *L. a.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 606, figs. on pl. 48.  
 1904. *L. a.*, Cleve, Mar. Invest. S. Africa, vol. iii., p. 191.  
     West side of the Cape Colony, 277 m.

## GEN. CONÆA, Giesbrecht.

1891. *Conæa*, Giesbrecht, Atti Acc. Lincei Rend., vol. vii., p. 477.  
 1892. *C.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., pp. 82, 605.

## \* CONÆA RAPAX, Giesbrecht.

1891. *Conæa rapax*, Giesbrecht, Atti Acc. Lincei Rend., vol. vii., p. 477.  
 1892. *C. r.*, Giesbrecht, F. u. Fl. Neapel, vol. xix., p. 605, pl. 48, figs. 50-59.  
 1904. *C. r.*, Cleve, Mar. Invest. S. Africa, vol. ii., p. 188.  
     Agulhas Current, 900 m.

FAMILY ASTEROCHERIDÆ.

1899. *Asterocherinæ*, Giesbrecht, F. u. Fl. Neapel, vol. xxv., p. 98.

The subfamilies of Giesbrecht's more comprehensive family Asterocheridæ are here raised a step in rank.

GEN. SCOTTOCHERES, Giesbrecht.

1897. *Scottocheres*, Giesbrecht, Zool. Anzeiger, vol. xx.

1899. *S.*, Giesbrecht, F. u. Fl. Neapel, vol. xxv., p. 104.

SCOTTOCHERES ELONGATUS (T. and A. Scott).

1894. *Acontiophorus elongatus*, T. and A. Scott, Ann. Nat. Hist., Ser. 6, vol. xii., p. 145, pl. 9, figs. 15-20.

1897. *Scottocheres e.*, Giesbrecht, Zool. Anzeiger, vol. xx., Nos. 521, 522 (sep. copy, p. 6).

1899. *S. e.*, Giesbrecht, F. u. Fl. Neapel, vol. xxv., p. 104, pl. 4, figs. 1-13.

1910. *S. e.*, Brady, Deutsche südpol. Exp., vol. xi. (Zool. iii.), p. 578, pl. 58, figs. 12-17.  
mon's Bay.

FAMILY DYSPONTIIDÆ.

1899. *Dyspontiinæ*, Giesbrecht, F. u. Fl. Neapel, vol. xxv., p. 105.

GEN. CRYPTOPONTIUS, Giesbrecht.

1899. *Cryptopontius*, Giesbrecht, F. u. Fl. Neapel, vol. xxv., pp. 30, 89, 108, 116, 120.

CRYPTOPONTIUS INNOMINATUS, Brady.

1910. *Cryptopontius innominatus*, Brady, Deutsche südpol. Exp., vol. xi. (Zool. iii.), p. 582, fig. 65 in text.

A much-damaged specimen, from lat. 30° S., long. 10° E., surface.

TRIBE CALIGIDEA.

1903. *Caligoida*, Sars, Crustacea of Norway, vol. iv., p. 2.

1910. *C.*, C. B. Wilson, Zool. Anzeiger, vol. xxxv., No. 20, pp. 619, 620.



## FAMILY CALIGIDÆ.

1905. *Caligidæ*, C. B. Wilson, Proc. U.S. Nat. Mus., vol. xxviii., p. 479.  
 1907. *C.*, C. B. Wilson, Proc. U.S. Nat. Mus., vol. xxxi., p. 669, and vol. xxxiii., p. 323.

In these valuable memoirs Wilson has gathered together apparently all the wisdom that has been poured out on this interesting group of parasites.

## GEN. CALIGUS, O. F. Müller.

1785. *Caligus*, Müller, Entomostraca, p. 128.  
 1905. *C.*, Wilson, Proc. U.S. Nat. Mus., vol. xxviii., p. 555.

## CALIGUS PELAMYDIS, Kröyer.

1863. *Caligus pelamydis*, Kröyer, Naturhist., Tidsskrift, Ser. 3, vol. ii., p. 124, pl. 4, fig. 4 *a-g*.  
 1905. *C. p.*, Wilson, Proc. U.S. Nat. Mus., vol. xxviii., pp. 559, 594, pl. 13, figs. 154-161, pl. 14, fig. 161 *a*.  
 1910. *C. p.*, Brady, Deutsche südpol. Exp., vol. xi. (Zool. iii.), p. 589, fig. 69 (2) in text. Simon's Bay, in net with fish.

## GEN. PANDARUS, Leach.

1816. *Pandarus*, Leach, Encycl. Brit., ed. 5, Suppl., p. 405, art. Annulosa.  
 1907. *P.*, Wilson, Proc. U.S. Nat. Mus., vol. xxxiii., pp. 346, 387.

## PANDARUS ARMATUS, Heller.

1866. *Pandarus armatus*, Heller, Novara Crustacea, p. 202, pl. 19, fig. 4.  
 On *Scyllium africanum* from the Cape of Good Hope.

## GEN. CECROPS, Leach.

1816. *Cecrops*, Leach, Encycl. Brit., ed. 5, Suppl., p. 405.  
 1907. *C.*, Wilson, Proc. U.S. Nat. Mus., vol. xxxiii., pp. 465, 465.

## \* CECROPS LATREILLII, Leach.

1816. *Cecrops latreillii*, Leach, Encycl. Brit., ed. 5, Suppl., p. 405, pl. 20, figs. 1-8.  
 1907. *C. l.*, Wilson, Proc. U.S. Nat. Mus., vol. xxxiii., p. 468, pls. 38, 39.

1910. *C. l.*, Stebbing, S.A. Crustacea, pt. 5.

No. 55, specimens sent by Dr. Gilchrist, from gills of *Orthagoriscus mola* taken at the Cape of Good Hope.

GEN. ORTHAGORISCICOLA, Poche.

1837. *Læmargus* (preocc.), Kröyer, Naturhist. Tidsskrift, Ser. 1, vol. i., p. 500.

1902. *Orthagoriscicola*, Poche, Zool. Anzeiger, vol. xxvi., p. 13.

1907. *O.*, Wilson, Proc. U.S. Nat. Mus., vol. xxxiii., p. 472.

\* ORTHAGORISCICOLA MURICATUS (Kröyer).

1837. *Cecrops* (? *Læmargus*) *muricatus*, Kröyer, Naturhist. Tidsskr., vol. i., p. 487, pl. 5, figs. A-E.

1863. *Læmargus m.*, Kröyer, Naturhist. Tidsskr., Ser. 3, vol. ii., p. 262.

1902. *Orthagoriscicola muricata*, Poche, Zool. Anzeiger, vol. xxvi., p. 13.

1907. *O. m.*, Wilson, Proc. U.S. Nat. Mus., vol. xxxiii., p. 473, pls. 40, 41.

1910. *O. muricatus*, Stebbing, S.A. Crustacea, pt. 5.

No. 52, specimens sent by Dr. Gilchrist, from skin of *Orthagoriscus mola* taken in Table Bay. The termination of Poche's generic name is not feminine, so that Kröyer's specific name should remain unchanged.

GEN. ECHTHROGALEUS, Steenstrup and Lütken.

1861. *Echthrogaleus*, Steenstrup and Lütken, K. Danske Vid. Selsk. Skr., Ser. 5, vol. v., p. 380 (40).

1907. *E.*, Wilson, Proc. U.S. Nat. Mus., vol. xxxiii., p. 362.

\* ECHTHROGALEUS COLEOPTRATUS (Guérin).

1837. *Dinematura coleoptrata*, Guérin, Iconogr., Crustacés, pl. 35 fig. 6 (*Dinemoura c.* in text, p. 42, 1843).

1861. *Echthrogaleus coleoptratus*, Steenstrup and Lütken, K.D. Vid. Selsk. Skr., Ser. 5, vol. v., p. 380 (40), pl. 8, fig. 15.

1907. *E. c.*, Wilson, Proc. U.S. Nat. Mus., vol. xxxiii., pp. 363, 367, pl. 19.

1910. *E. c.*, Stebbing, S.A. Crustacea, pt. 5.

No. 54, specimen sent by Dr. Gilchrist, from *Orthagoriscus mola* taken in Table Bay.

## FAMILY CHONDRACANTHIDÆ.

1840. "*Chondracanthiens*," Milne-Edwards, Hist. Nat. Crust., vol. iii., p. 491.  
 1899. *Chondracanthidæ*, Bassett-Smith, Proc. Zool. Soc., p. 488.

## GEN. SPHYRION, Cuvier.

1830. "*Les Sphyrions*," Cuvier, Le Règne Animal, éd. 2, vol. iii., p. 257.  
 1829-43. *Sphyrion*, Guérin, Iconographie, Zoophytes, p. 11.  
 1900. *S.*, Stebbing, S.A. Crustacea, pt. 1, p. 59.

## \* SPHYRION LÆVIGATUM, Guérin.

- 1829-43. *Sphyrion lævigatus*, Guérin, Iconographie, Zoophytes, p. 11, pl. 9, fig. 4.  
 1900. *S. lævigatum*, Stebbing, S.A. Crustacea, pt. 1, p. 60, pl. 4.  
 No. 20, specimen sent by Dr. Gilchrist, from the "King-Klip-fish," Koning Klip Visch, *Gemypterus capensis* (Smith), taken on sand-banks near the entrance to Table Bay (see Mar. Invest. S. Africa, vol. i., p. 143).

## GEN. MEDESICASTE, Kröyer.

1864. *Medesicaste*, Kröyer, Naturhist. Tidsskr., Ser. 3, vol. ii., pt. 3, pp. 386-388;  
 1899. *M.*, Bassett-Smith, Proc. Zool. Soc., p. 489.

## MEDESICASTE PENETRANS, Heller.

1866. *Medesicaste penetrans*, Heller, Novara Crustacea, pp. 235, 267, pl. 25, figs. 1, 2.  
 Found in the mouth cavity of *Trigla capensis*, Cuvier and Valenciennes, taken at the Cape.

## FAMILY LERNÆIDÆ.

1905. *Lernæidæ*, Stebbing, S.A. Crustacea, pt. 3, p. 116.  
 Under this reference bibliographical notes are given.  
 1910. *L.*, C. B. Wilson, Zool. Anzeiger, vol. xxxv., No. 20, p. 620.  
 Wilson says: "Further study is likely to emphasize the fact that the Lernæidæ, in spite of their degeneration, are

more closely related to the Caligidæ and Dichelestiidae than they are to the Lernæopodidae." He therefore proposes to transfer the Lernæidae to the Caligoida, here called Caligidea.

GEN. PENNELLA, Oken.

1815. *Pennella*, Oken, Lehrbuch der Naturgeschichte, pt. 3, zool., p. 357.

1905. *P.*, Stebbing, S.A. Crustacea, pt. 3, p. 117.

\* PENNELLA ORTHAGORISCI, Wright.

1870. *Pennella orthagorisci*, Wright, Ann. Nat. Hist., Ser. 4, vol. v., p. 45, pl. 1.

1905. *P. o.*, Stebbing, S.A. Crustacea, pt. 3, p. 119.

No. 168, sent by Dr. Gilchrist, from an *Orthagoriscus mola* caught in Table Bay.

TRIBE LERNEOPODIDEA.

With the removal of the genus *Lernæa* and the family Lernæidae from the tribe Lernæoida of Sars, the name of that tribe must undergo some change, for which tentatively I propose Lerneopodidea, on the supposition that *Lerneopoda* may be the premier genus. Bassett-Smith gives a reference to *Lernæopoda cyprinacea*, Hermann, 1783, although both he and Heller attribute the genus to Krøyer, while Krøyer himself (Naturh. Tidsskr., vol. i., p. 194, 1837) attributes it to de Blainville, who, in fact, instituted it as *Lerneopoda* in 1823, or earlier (see Desmarest, Consid. gén. Crust., p. 350).

FAMILY LERNEOPODIDÆ.

1840. "*Lernæopodiens*," Milne-Edwards, Hist. Nat. Crust., vol. iii., p. 505, and table facing p. 492.

1899. *Lernæopodidæ*, Bassett-Smith, Proc. Zool. Soc., p. 496.

GEN. LERNEOMYZON, de Blainville.

1823. *Lerneomyzon*, de Blainville, Dict. Sci. Nat., vol. xxvi., p. 122.

1830. "*Les Anchorelles*," Cuvier, Règne Animal, éd. 2, vol. iii., p. 257 (Nematoidea).

Since de Blainville's name (given as *Lerneomizon* by

Desmarest and as *Lernæomyzon* by Bassett-Smith), seems undoubtedly prior to Cuvier's genus of intestinal worms, the preference for *Anchorella*, to which Cuvier in 1830 did not even vouchsafe a Latin form, is not easy to explain.

LERNEOMYZON DENTICIS (Kröyer).

1864. *Anchorella denticis*, Kröyer, Naturhist. Tidsskr., Ser. 3, vol. ii., p. 370, pl. 16, fig. 4 a, b.

1866. *A. d.*, Heller, Novara Crustacea, p. 243.

"On *Dentex rupestris* from the Cape." Dr. Gilchrist (Mar. Invest., vol. i., pp. 109, 114) points out that *Pagrus laticeps*, Cuvier and Valenciennes, has sometimes been confused with the true *Dentex rupestris*, of those authors, both of the fishes being South African.

LERNEOMYZON CANTHARI (Heller).

1866. *Anchorella canthari*, Heller, Novara Crustacea, p. 242, pl. 24, fig. 6.

On *Cantharus bleekeri* from the Cape. Dr. Gilchrist's Catalogue includes *Cantharus blochii*, Cuvier and Valenciennes, the "Hottentot," so that possibly Heller writes *C. bleekeri* by mistake for *C. blochii*.

FAMILY SPHÆRONELLIDÆ.

1887. *Choniostomatidæ*, Hansen, Dijnphna-Togtets zool.-bot. Udbytte, p. 271.

1897. *C.*, Hansen, The Choniostomatidæ, Copepoda parasites on Malacostraca.

1902. *Sphæronellidæ*, Stebbing, Encycl. Brit., ed. 10, vol. xxviii., Suppl. vol. iv., p. 273.

The genus *Sphæronella* being earlier than Hansen's *Choniostoma* should give its title to the family.

GEN. SPHÆRONELLA, Salensky.

1868. *Sphæronella*, Salensky, Arch. Naturg., vol. xxxiv., p. 301.

1897. *S.*, Hansen, The Choniostomatidæ, pp. 4, 98.

SPHÆRONELLA CAPENSIS, Hansen.

1897. *Sphæronella capensis*, Hansen, The Choniostomatidæ, pp. 100, 131, pl. 5, figs. 4a-4c, pl. 6, figs. 1a-1d.



Habitat in the marsupium of a female of *Lemboides afer*, Stebbing, from South Africa, at or near the Cape of Good Hope.

## THYROSTRACA.

For the early synonymy of this term see the article Thyrostraca in the Encyclopædia Britannica, ed. 10, vol. xxxiii., Suppl., vol. ix., p. 319, 1902.

### THORACICA.

#### PEDUNCULATA.

##### FAMILY LEPADIDÆ.

###### GEN. LEPAS, Linn.

1758. *Lepas* (part) Linn., Systema Naturæ, ed. 10, p. 667.  
 1851. *Lepas*, Darwin, The Lepadidæ, Ray Soc., p. 67.  
 1907. *Lepas*, Pilsbry, U.S. Nat. Mus., Bulletin 60, p. 79.

###### LEPAS ANATIFERA, Linn.

1758. *Lepas anatifera*, Linn., Systema Naturæ, ed. 10, p. 667.  
 1866. *L. a.*, Heller, Reise der Novara, Crustaceen, pp. 253, 267 (Cape).  
 1883. *L. a.*, Hoek, Challenger Reports, vol. viii., pt. 3, p. 38, pl. 1, figs. 1, 2.

“Cape of Good Hope, November, 1873. Numerous specimens of very different sizes (capitulum 5–45 mm.). The larger specimens with ova; taken from a log of wood.”

###### \* LEPAS HILLII (Leach).

1818. *Pentalasmis hillii*, Leach, Tuckey's Congo Expedit., p. 413.  
 1848. *Anatifa lævis*, Brug., Krauss, Die Südafrikanischen Mollusken, p. 136.  
 “At the mouth of the river Knysna.” Whether the species named by Krauss belongs to this or the preceding specific name is apparently an open question.  
 1851. *Lepas hillii*, Darwin, The Lepadidæ, Ray Soc., p. 77, pl. 1, fig. 2.  
 1910. No. 35, well-grown specimens sent by Dr. Gilchrist,

were taken "from bottom of barque 'Antarctic,' of Swansea 8th Sept. 98 lying in Cape Docks, cleared at Shields and left for Cape Town June 1898."

LEPAS AUSTRALIS, Darwin.

1851. *Lepas australis*, Darwin, The Lepadidæ, Ray Soc., p. 89, pl. 1, fig. 5.

1897. *L. a.*, Weltner, Arch. Naturg., vol. lxiii., pt. 1, p. 245.

Specimens taken among the Hydroidpolyps, among algæ, on stones, and attached to *Balanus capensis*, at Cape Town, by S.M.S. Prinz Adalbert.

\* LEPAS FASCICULARIS, Ellis and Solander.

1786. *Lepas fascicularis*, Ellis and Solander, Natural History of Zoophytes, p. 197, pl. 15, fig. 6.

1851. *L. f.*, Darwin, The Lepadidæ, Ray Soc., p. 92, pl. 1, fig. 6.

1910. *L. f.*, Stebbing, S.A. Crustacea, pt. 5.

No. 167, specimens received from Dr. Gikchrist, who writes: "Appendages, body and stalk were of a pale blue colour in the larger specimens, while in the smaller, which are apparently a different kind altogether, these parts are of a dark brown. The gelatinous part round the feather was white, faintly yellow." On the colouring and extreme variability of this species, see Darwin, The Lepadidæ, p. 98. Darwin refers to fig. 5 of Ellis and Solander, which is their *Lepas dorsalis*. Sherborn's *Index Animalium* does not mention either that species or *Lepas fascicularis*.

LEPAS TESTUDINATA, C. W. Aurivillius.

1892. *Lepas testudinata*, C. W. Aurivillius, Ofversigt af Kgl. Svenska Vet. Akad. Förh., No. 3, p. 123.

1894. *L. t.* Aurivillius, Kongl. Svenska Vet. Akad. Handlingar, vol. xxvi., No. 7, p. 7, pl. 1, figs. 1-3, pl. 8, fig. 4.

A quantity of specimens on objects driving about in the sea, collected at Table Bay by G. de Vylder; two specimens at Port Natal by Wahlberg.

GEN. OCTOLASMIS, Gray.

1825. *Octolasmis*, Gray, Annals of Philosophy, vol. xxvi., or new series, vol. x., p. 100.

1851. *Dichelaspis*, Darwin, The Lepadidæ, Ray Soc., p. 115.  
 1907. *Octolasmis*, Pilsbry, U.S. Nat. Mus., Bulletin 60, p. 93.

## OCTOLASMIS COR (Aurivillius).

1892. *Dichelaspis cor*, Aurivillius, Öfv. af Kgl. Svenska Vet. Akad. Förh., No. 3, p. 124.  
 1894. *D. c.*, Aurivillius, Kongl. Svenska Vet. Akad. Handlingar, vol. xxvi., No. 7, p. 20, pl. 2, figs. 1, 2.  
 "At Port Natal, attached in large numbers to the branchiæ of a brachyurous decapod," collected by Wahlberg.

## GEN. CONCHODERMA, Olfers.

- 1814?. *Conchoderma*, von Olfers, Magaz. der Gesellsch. Naturforsch. Freunde zu Berlin, vol. viii. (1818), drittes Quartal (dated 1814), p. 177.  
 1851. *C.*, Darwin, The Lepadidæ, Ray Soc., p. 136.  
 The true date of the genus is very uncertain, since in vol. viii. of the Ges. Nat. Freunde the fourth part, which, like the third, is dated 1814, actually contains an article on the weather of 1816!

## \* CONCHODERMA AURITUM (Linn.).

1767. *Lepas aurita*, Linn., Systema Naturæ, ed. 12, p. 1110.  
 1851. *Conchoderma aurita*, Darwin, The Lepadidæ, Ray Soc., p. 141, pl. 3, fig. 4.  
 1910. *C. auritum*, Stebbing, S.A. Crustacea, pt. 5.

Specimens sent by Dr. Gilchrist, No. 36, found on the barque mentioned under *Lepas hillii*, and others, No. 28, on a "Coronula taken from skin of hump-back whale cut up in Table Bay, 16-6-77." Several fine specimens of this species have also been sent me by Mr. H. W. Bell-Marley. They are seated on *Coronula diadema*, from a hump-back whale taken at Durban. A striking figure of the two cirripede species combined is given as early as 1759 by Ellis (Phil. Trans., vol. 1., pt. 2, for the year 1758, pl. 34, figs. 1 and 7). Ellis, at p. 846, explains that the Barnacle is generally called *Balanus* or *Concha anatifera*, but that Linnæus distinguished the fish or actual animal as Triton, and called the covering Lepas. In the explanation of plate 34, under Lepadæ pedatæ, fig. 1 is named *Lepas nuda carnosa aurita*, rendered into English as "Barnacles with stems," and "naked fleshy

Barnacle with ears." At p. 849 he says: "I have called this animal the Naked Fleshy Barnacle with Ears; but it appears to claim the name of Triton rather than Lepas, according to Linnæus, as having no shelly habitation." It will be perceived that the designation of the species is not binomial. Ellis's paper was read Dec. 21, 1758, but the Phil. Trans. for 1758 was not published till 1759.

\* CONCHODERMA VIRGATUM (Spengler).

1790. *Lepas virgata*, Spengler, Skrifter Naturhist. Selskabet, vol. i., p. 207, pl. 6, fig. 9.  
 1851. *Conchoderma virgata*, Darwin, The Lepadidæ, Ray Soc., p. 146, pl. 3, fig. 2, pl. 9, fig. 4.  
 1905. *Conchoderma virgatum*, Stebbing, S.A. Crustacea, pt. 3, in Gilchrist's Marine Investigations, vol. iv., p. 120.

Specimens attached to *Pennella orthagorisci*, Wright, from a sun-fish caught in Table Bay in 1903. Other specimens from the Cape, No. 37, were sent by Dr. Gilchrist in 1898, from the Swansea barque above-mentioned.

GEN. SCALPELLUM, Leach.

1817. *Scalpellum*, Leach, Journ. de Physique, vol. lxxxv., p. 68.

Dr. Annandale, in Memoirs of the Indian Museum, vol. ii., No. 2, p. 63, 1909, proposes to include this genus, together with *Pollicipes* and *Lithotrya* in a family Pollicipedidæ. But Pilsbry has pointed out that *Mitella*, Oken, 1815, has priority over *Pollicipes*, Leach, 1817. Annandale's family, therefore, if adopted, should be named Mitellidæ.

SCALPELLUM ORNATUM (J. E. Gray).

1848. *Thaliella ornata*, Gray, Proc. Zool. Soc. London, pt. xvi., 1848, p. 44, Annulosa, plate.

Dr. J. E. Gray says: "This genus was shown to me by Mr. J. S. Bowerbank, who received it from Algoa Bay attached to some species of *Plumaria*." He describes the species as "*Thaliella ornata*. Pale horn-coloured, varied with red spots, or with a single red band on each side; valves horny, subpellucid, radiately striated. On *Plumaria*, Algoa Bay, Cape of Good Hope. Presented to the British Museum by J. S. Bowerbank, Esq."

1851. *Scalpellum ornatum*, Darwin, Ray Soc., p. 244, pl. 6, fig. 1.  
 "Algoa Bay, South Africa. Attached to Sertularia and Plumularia."

SCALPELLUM RUTILUM, Darwin.

1851. *Scalpellum rutilum*, Darwin, Ray Soc., p. 253, pl. 6, fig. 2 *a, b, c*.  
 A small specimen, answering well to Darwin's account of this species, sent me by Mr. H. W. Bell-Marley, was taken in 37 m. depth, off Bird Island.

## OPERCULATA.

### FAMILY BALANIDÆ.

GEN. BALANUS, Ellis? or Da Costa.

1778. *Balanus*, Da Costa, Hist. Nat. Test. Brit. (see Darwin, Balanidæ, p. 177), and British Conch., p. 249 (see Sherborn, Index Animalium, p. lvii).  
 1789. *B.*, J. G. Bruguière, Ency. Méth. (Vers) (i) 1789, xii & 158.  
 Tom. i., pt. 1, pp. 1-344, though dated on title-page 1792, was published in 1789, as shown by original wrappers. See Sherborn and B. B. Woodward, Ann. Nat. Hist. Ser. 7, vol. xvii., p. 579.  
 1854. *B.*, Darwin, The Balanidæ, Ray Soc., p. 177.  
 1902. *B.*, Sherborn, Index Animalium, pp. lvii, 104, 1083.

Sherborn does not include Ellis as an authority for *Balanus*, no doubt on the ground (mentioned by Darwin) that in 1759 he was not a binomial authority. The reference to Da Costa, accidentally omitted from Sherborn's general list, is supplied on p. lvii, supplementing Darwin's reference by giving p. 249 for the occurrence of *Balanus* in Da Costa's Conchology. Darwin, Balanidæ, p. 204, accepts Ellis as authority for *B. tulipiformis*, referring to Phil. Trans., vol. 1. (1758), pl. 30, fig. 10. But the date should be 1759, the plate number 34, and, for the reason given above, the species should be accredited to Darwin himself, not to Ellis.

BALANUS TINTINNABULUM (Linn.).

1758. *Lepas tintinnabulum*, Linn., Systema Naturæ, ed. 10, p. 668.  
 In this edition the double n of the specific name is expressed by ñ.



1848. *B. t.*, Krauss, Die Südafrikanischen Mollusken, p. 135.

From Natal Bay.

1854. *B. t.*, Darwin, the Balanidæ, Ray Soc., p. 194, pl. 1, figs. *a-l*, pl. 2, figs. *1a-1o*.

At p. 198 Darwin says: "I have seen [young] specimens attached to kelp from the Cape of Good Hope, with their parietes white and ribbed, and their radii mottled with pinkish-purple." On p. 200 he says that this species, as one element of its distribution, "ranges from the Island of Madeira to the Cape of Good Hope."

#### BALANUS CAPENSIS, Darwin.

1854. *Balanus capensis*, Darwin, The Balanidæ, Ray Soc., p. 209, pl. 2, figs. *4 a-b*.

"Cape of Good Hope. Attached to stems of Fuci, Algoa Bay. . . . Attached to floating kelp, Lagulhas Bank." In 1759 Ellis (Phil. Trans., vol. 1., for 1758) figured this species on pl. 34, fig. 14, as *Balanus capensis ore obliquo*, not a binomial designation, so that the species, if distinct from *B. psittacus*, Molina, must be assigned to Darwin himself.

#### BALANUS CALCEOLUS, Darwin.

1854. *Balanus calceolus*, Darwin, The Balanidæ, Ray Soc., p. 218, pl. 3, figs. *3 a-e*.

A specimen answering to Darwin's account of this species, sent me by Mr. W. H. Bell-Marley, was taken in 37 m. depth off Bird Island.

#### BALANUS SPONGICULA, Brown.

1827. *Balanus spongicula*, Brown, Illustrations of the Conchology of Great Britain and Ireland, pl. 7, fig. 6.

The text is confined to the explanation of the plates, unattended by numbering of the pages; *spongicula* may be regarded as a printer's error.

1854. *B. spongicola*, Darwin, the Balanidæ, Ray Soc., p. 225, pl. 4, figs. *1 a-d*.

"Lagulhas Bank, Cape of Good Hope, on detached kelp, with *B. Capensis*."

#### BALANUS AMPHITRITE, Darwin.

1854. *Balanus amphitrite*, Darwin, The Balanidæ, Ray Soc., p. 240, pl. 5, figs. *2a-2o*.

Among nine varieties Darwin names three from South Africa—*communis*, *venustus*, and *niveus*—specifying Natal as a locality for the first two.

1848. *Balanus radiatus*, Brug., Krauss, Die Südafrikanischen Mollusken, p. 136.

From Natal Bay. Krauss, in Die Südafrikanischen Crustaceen, Malacostraca, p. 25, 1843, incidentally mentions "*Balanus radiatus* Br." as frequent in Natal Bay, young specimens being situated on the carapace, chelipeds, and walking-legs of the crabs which he names *Charybdis granulatus*, Dehaan, *Thalamita admete*, Latreille, *Thalamita prymna*, Dehaan, and *Thalamita crenata*, Latreille. Darwin explains that a species, figured by Chemnitz in 1785 and described by Spengler in 1790, was named *Balanus radiatus* by Bruguière in 1789, but that from Spengler's description it cannot be the same as *B. amphitrite*. The latter he identifies with *Lepas balanoides*, Poli, 1795 (not *L. b.*, Linn., 1767), and with *Lepas radiata*, Wood, 1815 (not *B. radiatus*, Brug. 1789). These two names being preoccupied, the species mentioned by Krauss should probably be called *B. amphitrite*.

#### BALANUS CRENATUS, Bruguière.

- 1789 or 1792. *Balanus crenatus*, Bruguière, Encycl. Méth. (Vers), vol. i., p. 168.\*
1854. *B. c.*, Darwin, The Balanidæ, p. 261, pl. 6, figs. 6a-6g.

At p. 264 Darwin says: "It appeared to me exceedingly improbable that an animal which can exist in lat. 75° N. should inhabit the hot shores of Jamaica; but subsequently I have received a specimen from Prof. Krauss, collected by himself in Algoa Bay, which is perfectly characterised, and even has the little cells under the sheath: so that I am compelled to admit this enormous range and capability of resisting the most extreme climates."

#### GEN. ACASTA, Leach.

1817. *Acasta*, Leach, Journal de Physique, vol. lxxv., p. 69.
1854. *A.*, Darwin, The Balanidæ, Ray Soc., p. 302.

\* It may be mentioned that vol. i., 1792, of the Encyclopédie Méthodique contains an introductory note to the effect that the first part (by which may be meant the edition of 1789) is called on the frontispiece "Tome Sixième au lieu de Tome Premier."

## ACASTA SPONGITES (Poli).

1791. *Lepas spongites*, Poli, Testacea utriusque Siciliæ, vol. i., p. 25, pl. 6, figs. 3-6.  
 1854. *Acasta* s., Darwin, the Balanidæ, Ray Soc., p. 308, pl. 9, figs. 1a-1d.

Speaking of the basis in this species, Darwin says: "It is often penetrated by small rounded irregular holes; and I have seen specimens from the Cape of Good Hope with parts like a sieve." The date and page of Poli's work are from Sherborn's Index Animalium. Darwin gives no page, and dates the work 1795, when the second volume was published.

## GEN. TETRACLITA, Schumacher.

1817. *Tetraclita*, Schumacher, Essai d'un Nouveau Système des Habitations des Vers Testacés, p. 91.  
 1854. *Tetraclita*, Darwin, The Balanidæ, Ray Soc., p. 321.

## TETRACLITA SQUAMOSA (Bruguière).

1789. *Balanus squamosus*, Bruguière, Encycl. Méth. (Vers), vol. i., p. 170, pl. 165, figs. 9, 10.  
 1790. *Lepas porosa*, Gmelin, Systema Naturæ, ed. 13, vol. i., pt. 6, p. 3212.  
 1854. *Tetraclita porosa*, Darwin, The Balanidæ, Ray Soc., p. 329, pl. 10, figs. 1a-1m.  
 1897. *T. p.*, Weltner, Arch. Naturg., vol. lxiii., pt. 1, p. 257.

Weltner reports the species as taken in the South Sea, at the Cape, by Bergius and by Johswich. Darwin supposed that Bruguière and Gmelin both published this species in the same year, and, as he did not know which had actual priority, he gave the preference to the better-known name. But the part of Gmelin's Systema which contains this species did not appear till 1790, as will be seen by Sherborn's Index Animalium. Accordingly Bruguière's specific name should be adopted, the work containing it having a year's priority, as explained above under *Balanus*.

## TETRACLITA SERRATA, Darwin.

1854. *Tetraclita serrata*, Darwin, The Balanidæ, Ray Soc., p. 334, pl. 10, figs. 2a-2d.

Darwin says: "I have seen three separate lots of this

species all from the Cape of Good Hope; one lot was collected by Dr. Krauss, at Algoa Bay, and I strongly suspect is the species described by him in his 'Südafrikanischen Mollusken' as *Conia porosa*." *Asemus porosus* is the name used by Krauss.

1848. *Asemus porosus* Ranzani, Krauss, Die Südafrikanischen Mollusken, p. 136.

From Algoa Bay.

1897. *Tetracilita serrata*, Weltner, Arch. Naturg., vol. lxiii., pt. 1, p. 258.

Weltner reports it from Port Grosvenor, in Pondo Land, South Africa, as found by Bachmann, "in great numbers on ledges of rock, bare at ebb-tide, especially on places where the surf splashes violently."

#### TETRACLITA ROSEA (Krauss).

1848. *Conia rosea*, Krauss, Die Südafrikanischen Mollusken, p. 136, pl. 6. fig. 28.

1854. *Tetracilita r.*, Darwin, The Balanidæ, Ray Soc., p. 335, pl. 10, figs. 3a-3d.

Darwin says: "I am greatly indebted to Professor Krauss for having sent me, for examination, the unique specimen collected by himself in Algoa Bay. There can be no doubt of the identity of the African and Australian specimens. It is a singular circumstance that the same species should occur in these two distant places, and, as far as at present known, not in the intermediate, more tropical coasts."

#### GEN. CORONULA, Lamarck.

1802. *Coronula*, Lamarck, Annales du Museum, vol. i., p. 464.

At p. 468 of the same volume Dufresne discusses the three species, *diadema*, *balænaris* and *testudinarius* assigned to this genus by Lamarck.

1854. *C.*, Darwin, The Balanidæ, Ray Soc., p. 397.

#### \* CORONULA DIADEMA (Linn.).

1767. *Lepas diadema*, Linn., Systema Naturæ, ed. 12, p. 1108.

1854. *Coronula d.*, Darwin, The Balanidæ, Ray Soc., p. 417, pl. 15, figs. 3-3b, pl. 16, figs. 1, 2, 7.

1873. *C. d.*, Lütken, Vidensk Selsk Skr., Ser. 5, vol. x., No. 3, p. 265 (specimen from Cape Museum).



1900. *C. d.*, R. Merloth, Trans. S.A. Phil. Soc., vol. xi., pt. 1, p. 1.

"The coronet barnacle, from a hump-back whale (*Megaptera boops*)," at the Cape.

1910. *C. d.*, Stebbing, S.A. Crustacea, pt. 5.

A specimen (No. 38), surmounted by *Conchoderma auritum*, sent me from the Cape by Dr. Gilchrist, and others from Durban, one of which was similarly occupied, sent by Mr. W. H. Bell-Marley, appear to me to belong to this species. One of the Durban specimens has the depressed shape, of which Darwin speaks in regard to his *Coronula reginæ* (The Balanidæ, Ray Soc., p. 419, pl. 15, fig. 5; pl. 16, fig. 4). It seems doubtful whether *C. reginæ* is really distinct from *C. diadema*.

\* CORONULA DARWINI, n.n.

1854. *Coronula balanaris*, Darwin, The Balanidæ, Ray Soc., p. 415, pl. 15, figs. 2, 2b, pl. 16, figs. 3, 5.

Darwin says: "I have examined nine sets of specimens having localities attached to them: three from off New South Wales; two off the Cape of Good Hope; two from the west coast of South America; and two marked only 'South Sea.' Hence I am led to conclude that this species is confined to the southern hemisphere, or if it extends into the northern hemisphere, it is probably only in the Pacific Ocean. I do not believe (though so stated in some works) that this species occurs on the shores of Europe." Now, Darwin begins his synonymy of this species with "LEPAS BALÆNARIS, Gmelin, Systema Naturæ (1789)." That reference would more properly run as *Lepas balanaris*, O. F. Müller, Gmelin's Systema Naturæ, ed. 13, vol. i., pt. 6, p. 3208 (1790). But Gmelin's synonymy identifies the species with Müller's *L. b.*, in the Zoologiæ Danicæ Prodromus, No. 3024, p. 250 (1776), and with the same species in "*O. Fabr. Fn. groenl.* p. 425, n. 425" (1780). His reference to "*Rumpf mus.* t. 14, f H.," is of no importance since the figure of a *Coronula* in the edition of 1705 is taken from a specimen supplied by Dr. D'Aquet, not necessarily of oriental origin. Gmelin ends the description of *L. balanaris* with the reasonable inquiry, "*an forsam eadem cum diademate?*" There can, however, be no reasonable doubt that Darwin's *C. balanaris* "attached to whales in the Southern Ocean," is distinct from *C. diadema* and *diadema's* not improbable synonym *C. balanaris* (Müller). I, therefore, associate



Darwin's own name with the species which he has taken so much trouble to discriminate.

1910. *C. darwini*, Stebbing, S.A. Crustacea, pt. 5.

From his imperfect and not quite accurate reference to Gmelin, and neglect of Gmelin's synonymy, it seems obvious, though strange, that Darwin did not consult Gmelin's work on this particular topic. Otherwise he must have perceived that Gmelin's *Lepas balanaris* was undoubtedly a species from the northern hemisphere. Krauss, in Die Südafrikanischen Mollusken, p. 135, 1848, mentions *Coronula balanaris*, Lamk., from Table Bay, with a reference to Lamareck, Ann. du Mus., vol. i., p. 468, pl. 30, figs. 3-4, and says that "the largest examples have a diameter of 18 lines, and adhere only with their margin, but the little ones with the whole upper side in the black epidermis of the whale." Perhaps he is including two species under one name.

#### GEN. TUBICINELLA, Lamareck.

1802. *Tubicinella*, Lamareck, Annales du Muséum National d'Histoire Naturelle, vol. i., p. 461.  
1854. *T.*, Darwin, The Balanidæ, Ray Soc., p. 430.

#### \* TUBICINELLA STRIATA, Lamareck.

1802. *Tubicinella striata*, Lamareck, Ann. du Muséum, p. 463.  
1806. *Lepas trachealis*, Shaw, Shaw and Nodder's Naturalist's Miscellany, vol. xvii., pl. 726.  
1848. *Tubicinella balanarum*, Lamk., Krauss, Die Südafrikanischen Mollusken, p. 135.  
1854. *Tubicinella trachealis*, Darwin, The Balanidæ, Ray Soc., p. 431, pl. 17, figs. 3a-3c.  
1900. *T. t.*, R. Merloth, Trans. S.A. Phil. Soc., vol. xi., pt. 1, p. 1.  
"From a southern right whale (*Balæna australis*)," captured in False Bay in 1898.  
1900. *T. t.*, Stebbing, S.A. Crustacea, pt. 1, p. 62, in Gilchrist's Marine Investigations, vol. i.

Specimens (No. 38A) were sent me by Dr. Gilchrist, with the statement that they were obtained from a Right Whale taken in False Bay. Darwin records the species from the Cape of Good Hope. While confessedly breaking "the great law of priority" in favour of Shaw's specific name *trachealis*, Darwin, as it seems to me, gives a very misleading account

of Lamarck's position, not giving any reference to the page and misquoting the words of Lamarck's paper. The French author did not name the species "*Tubicinella major et minus*" as Darwin states. On page 463 he records *Tubicinella* (*major*) *striata* and *Tubicinella* (*minor*) *striata*, with the explanation that they are perhaps varieties one of the other, though he suspects that they are two species. It is clear that the parenthetical words *major* and *minor* were introduced only for the sake of distinguishing what he considered to be at least two varieties, and that he was unwilling to apply more than one specific name, while the specific distinctness was still doubtful. This modesty does not warrant our despoiling him of the one specific name which he did give, and of which Darwin makes no mention. The doubt expressed in The Balanidæ as to the exact date of Shaw's *L. trachealis* has been solved by Mr. Sherborn, who explains that the plates 685-708 in vol. xvii. of the Naturalist's Miscellany were published in 1805, but plates 709-732 in 1806. For specimens crowded together on a whale harpooned in Table Bay, Krauss (*loc. cit.*) uses Lamarck's later name for this species, but gives a reference to Lamarck, Ann. du Mus., vol. i., p. 481, pl. 30, fig. 1.

#### GEN. CHTHAMALUS, Ranzani.

1820. *Chthamalus*, Ranzani, Memorie di Storia Naturale, Deca prima, p. 27.  
 1854. *Chthamalus*, Darwin, The Balanidæ, Ray Soc., p. 447.

#### CHTHAMALUS DENTATUS, Krauss.

1848. *Chthamalus dentatus*, Krauss, Die Südafrikanischen Mollusken, p. 135, pl. 6, fig. 27.  
 In Algoa Bay; frequent on the rocks.  
 1854. *C. d.*, Darwin, The Balanidæ, Ray Soc., p. 463, pl. 18, figs. 3a-3c.

Darwin observes that he has united two varieties considerably different in external aspect, but connected by intermediate forms. He says: "I have seen both varieties from Natal, and both from the west coast of Africa."

#### GEN. OCTOMERIS, Sowerby.

1825. *Octomeris*, G. B. Sowerby, Zoological Journal, vol. ii., p. 244.  
 1854. *O.*, Darwin, The Balanidæ, Ray Soc., p. 482.

OCTOMERIS ANGULOSA, Sowerby.

1825. *Octomeris angulosa*, Sowerby, Zoological Journal, vol. ii., p. 244, pl. 12, figs. 1-11.

Sowerby says: "We have given representations on our plate of the only species of this Genus, which we have lately received from the Cape of Good Hope, and named *Octomeris angulosa*" (p. 248).

1854. *O. a.*, Darwin, The Balanidæ, Ray Soc., p. 483, pl. 20, figs 2a-2b.

Darwin reports it from "Algoa Bay, Cape of Good Hope. Attached to littoral rocks; often associated with *Balanus Capensis* and *Chthamalus dentatus*."

## ACROTHORACICA.

1905. *Acrothoracica*, Gruvel, Monographie des Cirrhipèdes ou Thécostracés, p. 310.  
1909. *A.*, Calman, Crustacea, pt. 7, fasc. 3, of Lankester's Treatise on Zoology, p. 140.

## FAMILY KOCHLORINIDÆ.

1909. *Kochlorinidæ*, Calman, Crustacea, in Lankester's Treatise, p. 140.

The three families here assigned to the Acrothoracica are the Aleippidæ, Kochlorinidæ, and Cryptophialidæ. But since the proccupied *Aleippe* gives way to *Trypetesa*, Norman, the family Aleippidæ must be renamed Trypetesidæ.

## GEN. KOCHLORINE, Noll.

1872. *Kochlorine*, Noll, Berichte Senckenb. Ges., 1871-72, p. 24.  
1897. *K.*, Weltner, Arch. Naturg., vol. lxiii., pt. 1, p. 237.

## KOCHLORINE BIHAMATA, Noll.

1883. *Kochlorine bihamata*, Noll, Zool. Anzeiger, vol. vi., No. 147, p. 471.  
1883. *K. b.*, Hoek, Challenger Reports, vol. viii., pt. 25, p. 6.

Dr. Hoek gives Noll's authority for the statement that this species inhabits cavities in a *Haliotis* shell from the Cape of Good Hope.

The classification of Crustacea here adopted, without laying any claim to finality or perfection, is based on considerations of general convenience. It may be tabulated as follows:—

	PAGE		PAGE
MALACOSTRACA .....	283	ENTOMOSTRACA .....	481
BRACHYURA .....	283	BRANCHIOPODA .....	481
Brachyura genuina .....	283	Phyllopoda .....	481
Brachyura anomala .....	341	Cladocera .....	489
MACRURA .....	349	OSTRAPODA .....	495
Macrura anomala .....	349	COPEPODA .....	518
Macrura genuina .....	366		
SCHIZOPODA .....	395		
STOMATOPODA .....	404	THYROSTRACA .....	563
SYMPODA .....	409	THORACICA .....	563
ISOPODA .....	418	Pedunculata .....	563
Isopoda anomala .....	418	Operculata .....	567
Isopoda genuina .....	419	ACROTHORACICA .....	575
AMPHIPODA .....	447		

These principal sections and subsections are subdivided into numerous tribes. Of these the two, Thysanopodacea and Mysidacea, comprised in the Schizopoda, are set apart by recent authorities, as each possessing rank equivalent to that of the parent group. In the same way the Isopoda anomala or Apseudacea are sometimes withdrawn altogether from the Isopoda and given independent rank.

## INDEX OF NAMES,

*those in italics being such as for one reason or another are not adopted in this Catalogue.*

	PAGE		PAGE
<i>abdominale</i> ( <i>Pleuromma</i> ) .....	535	<i>Æthidius</i> .....	525
<i>abdominalis</i> ( <i>Diaptomus</i> ) .....	535	<i>Ætideus</i> .....	525
<i>abdominalis</i> ( <i>Pleuromamma</i> ) .....	535	<i>Aetideus</i> .....	525
<i>abyssalis</i> ( <i>Heterochæta</i> ) .....	537	<i>Ætidius</i> .....	525
<i>abyssalis</i> ( <i>Heterorhabdus</i> ) .....	537	<i>Ætidius</i> .....	525
<i>Acanthephyra</i> .....	394	<i>afer</i> ( <i>Eurystheus</i> ) .....	461
<i>acanthocercoides</i> ( <i>Leydigia</i> ) .....	493	<i>afer</i> ( <i>Lemboides</i> ) .....	460, 563
<i>Acanthonychidæ</i> .....	286	<i>affinis</i> ( <i>Euchæta</i> ) .....	528
<i>Acanthonychinæ</i> .....	286	<i>affinis</i> ( <i>Idotea</i> ) .....	433
<i>Acanthopus</i> .....	324	<i>affinis</i> ( <i>Leucothoe</i> ) .....	453
<i>acanthopus</i> ( <i>Dehaan</i> ) .....	287	<i>affinis</i> ( <i>Macrothrix</i> ) .....	492
<i>Acartia</i> .....	542	<i>affinis</i> ( <i>Sesarma</i> ) .....	321
<i>Acasta</i> .....	569	<i>affinis</i> ( <i>Trichodactylus</i> ) .....	295
<i>Achæopsis</i> .....	285	<i>affinis</i> ( <i>Xantho</i> ) .....	297
<i>Achelous</i> .....	307	<i>afra</i> ( <i>Gammaropsis</i> ) .....	461
<i>Acontiphorus</i> .....	557	<i>africana</i> ( <i>Caridina</i> ) .....	394
<i>Acrocalanus</i> .....	524	<i>africana</i> ( <i>Iphinoë</i> ) .....	411
<i>Acrothoracica</i> .....	575	<i>africana</i> ( <i>Leydigia</i> ) .....	493
<i>Actæa</i> .....	298	<i>africana</i> ( <i>Macrocypris</i> ) .....	503
<i>Acteidae</i> .....	296	<i>africana</i> ( <i>Talorchestia</i> ?) .....	459
<i>aculeata</i> ( <i>Cypridopsis</i> ) .....	499	<i>africana</i> ( <i>Xestoleberis</i> ) .....	505
<i>aculeata</i> ( <i>Cypris</i> ) .....	499	<i>africanus</i> ( <i>Crossophorus</i> ) .....	518
<i>aculeata</i> ( <i>Lubbockia</i> ) .....	556	<i>agassizi</i> ( <i>Thysanopoda</i> ) .....	396
<i>aculeatus</i> ( <i>Ægisthus</i> ) .....	544	<i>agassizii</i> ( <i>Thysanopoda</i> ) .....	396
<i>aculeatus</i> ( <i>Armadillo</i> ) .....	446	<i>agulhasensis</i> ( <i>Merhippolyte</i> ) .....	391
<i>aculeatus</i> ( <i>Diploexochus</i> ) .....	446	<i>albescens</i> ( <i>Diploexochus</i> ) .....	447
<i>aculeatus</i> ( <i>Paracalanus</i> ) .....	523	<i>albolineatus</i> ( <i>Grapsus</i> ) .....	318
<i>acuminata</i> ( <i>Conchæcetta</i> ) .....	509	<i>aldabræ</i> ( <i>Stenocypris</i> ) .....	500
<i>acuminata</i> ( <i>Conchæcia</i> ) .....	509	<i>algoense</i> ( <i>Sphæroma</i> ) .....	430
<i>acuta</i> ( <i>Euchæta</i> ) .....	528	<i>algoensis</i> ( <i>Cymodocella</i> ) .....	430
<i>acuta</i> ( <i>Labidocera</i> ) .....	542	<i>Alima</i> .....	407
<i>acuta</i> ( <i>Pontella</i> ) .....	542	<i>allotherium</i> ( <i>Conchæcia</i> ) .....	509
<i>acuticosta</i> ( <i>Conchæcia</i> ) .....	510	<i>Alona</i> .....	494
<i>acutifrons</i> ( <i>Caprella</i> ) .....	465	<i>Alonella</i> .....	494
<i>acutum</i> ( <i>Labidocera</i> ) .....	542	<i>Alonopsis</i> .....	493
<i>adhærens</i> ( <i>Stenothoe</i> ) .....	453	<i>Alpheidae</i> .....	388
<i>admete</i> ( <i>Cancer</i> ) .....	309	<i>Alpheus</i> .....	388
<i>admete</i> ( <i>Thalamita</i> ) .....	309	<i>Amaryllis</i> .....	448
<i>Æga</i> .....	422	<i>amblyoptha</i> ( <i>Conchæcia</i> ) .....	514
<i>ægagropila</i> ( <i>Cancer</i> ) .....	345	<i>ametra</i> ( <i>Conchæcia</i> ) .....	514
<i>ægagropila</i> ( <i>Dromia</i> ) .....	345	<i>ametra</i> ( <i>Stenocypris</i> ) .....	500
<i>Ægeon</i> .....	383	<i>Amorphopus</i> .....	315
<i>Ægidæ</i> .....	422	<i>Ampelisca</i> .....	450
<i>Ægisthus</i> .....	543	<i>Ampeliscidæ</i> .....	450
<i>æquilibra</i> ( <i>Caprella</i> ) .....	466	<i>Amphicypris</i> .....	502



	PAGE		PAGE
Amphipoda.....	447	armatus ( <i>Æthidius</i> ) .....	525
Amphipronœ .....	479	armatus ( <i>Etideus</i> ) .....	525
<i>Amphithoe</i> .....	462	armatus ( <i>Ætideus</i> ) .....	526
amphitrite ( <i>Balanus</i> ) .....	310, 568	armatus ( <i>Etidius</i> ) .....	525
Ampithoe .....	462	armatus ( <i>Ætidius</i> ) .....	525
Ampithoidæ .....	462	armatus ( <i>Ætidius</i> ) .....	525
amplifrons ( <i>Cymodoce</i> ) .....	429	armatus ( <i>Pandarus</i> ) .....	558
amplifrons ( <i>Exosphæroma</i> ) .....	429	armatus ( <i>Pseudocalanus</i> ) .....	525
Anapagurus .....	358	armiger ( <i>Gaetanus</i> ) .....	526
anatifera ( <i>Lepas</i> ) .....	320, 563	Arpacticidæ .....	543
Anchialina .....	402	Arpacticidea .....	542
Anchialinidæ .....	402	arrosor ( <i>Cancer</i> ) .....	350
<i>Anchialus</i> .....	402	arrosor ( <i>Dardanus</i> ) .....	350
<i>Anchorella</i> .....	562	arrosor ( <i>Pagurus</i> ) .....	350
<i>Anchylomeridæ</i> .....	476	arrosor ( <i>Petrochirus</i> ) .....	350
angulata ( <i>Goneplax</i> ) .....	312	<i>artificiosus</i> ( <i>Dromia</i> ) .....	346
angulatus ( <i>Cancer</i> ) .....	312	artificiosus ( <i>Conchœetes</i> ) .....	346
angulosa ( <i>Octomeris</i> ) .....	575	Ascidicolidæ .....	550
angusta ( <i>Niambia</i> ) .....	442	Asellota .....	435
angusta ( <i>Sapphirina</i> ) .....	552	<i>asper</i> ( <i>Mithrax</i> ) .....	292
Aniloera .....	423	aspera ( <i>Schizophris</i> ) .....	292
<i>Anisopus</i> .....	305	<i>assimilis</i> ( <i>Atyloides</i> ) .....	456
anisuropus ( <i>Byblis</i> ) .....	451	<i>assimilis</i> ( <i>Cypridopsis</i> ) .....	499
anomala ( <i>Ampelisca</i> ) .....	450	<i>assimilis</i> ( <i>Pleuroxus</i> ) .....	494
anomala ( <i>Brachyura</i> ) .....	341	Astacida .....	378
anomala ( <i>Isopoda</i> ) .....	418	Astacidea .....	378
anomala ( <i>Macrura</i> ) .....	349	Astacillidæ .....	434
anomalipes ( <i>Thaumastoplax</i> ) .....	316	<i>Astacura</i> .....	378
Anomopoda .....	489	<i>Astacus</i> .....	378
<i>Anostraca</i> .....	481	Asterocheridæ .....	557
antarctica ( <i>Conchœcia obtusata</i> , var.) .....	510	<i>Asterocherinæ</i> .....	557
antarcticus ( <i>Inachus</i> ) .....	284	<i>Atelecyclus</i> .....	300, 310
Antarcturus .....	434	Atergatis .....	296
Anthura .....	419	<i>Athanasus</i> .....	339
Anthuridæ .....	419	atlantica ( <i>Conchœcia</i> ) .....	512
Antilibinia .....	287	atlantica ( <i>Gammaropsis</i> ) .....	461
Aora .....	459	atlantica ( <i>Halocypris</i> ) .....	512
Aoridæ .....	459	atlantica ( <i>Nephropsis</i> ) .....	379
Aphiloscia .....	443	atlanticus ( <i>Eurystheus</i> ) .....	461
Apodidæ .....	484	attenuatus ( <i>Calanus</i> ) .....	521
Apos .....	484	attenuatus ( <i>Eucalanus</i> ) .....	521
Apseudacea .....	419	Attheyella .....	546
Apseudes .....	419	Atyidæ .....	393
Apseudidæ .....	419	Atylidæ .....	455
Apus .....	484	aubryi ( <i>Potamonautes</i> ) .....	294
aratra ( <i>Cypris</i> ) .....	496	aubryi ( <i>Thelphusa</i> ) .....	294
arborea ( <i>Cypridina</i> ) .....	517	aubryi ( <i>Thelphusa</i> ) .....	295
Arcania .....	337	<i>Augaptilus</i> .....	538
Archiconchœcia .....	515	<i>aurea</i> ( <i>Cypris</i> ) .....	498
arcticus ( <i>Sergestes</i> ) .....	381	aureus ( <i>Cyprinotus</i> ) .....	498
arcuata ( <i>Ocypode</i> ) .....	327	<i>aurita</i> ( <i>Conchoderma</i> ) .....	565
arcuata ( <i>Uca</i> ) .....	327	<i>aurita</i> ( <i>Lepas</i> ) .....	565
<i>arcuatus</i> ( <i>Gelasimus</i> ) .....	327	aurita ( <i>Lucicutia</i> ) .....	537
arcuicornis ( <i>Calanus</i> ) .....	524	auritum ( <i>Conchoderma</i> ) .....	565
arcuicornis ( <i>Clausocalanus</i> ) .....	524	australiensis ( <i>Daphnia</i> ) .....	491
areolata ( <i>Chlorodopsis</i> ) .....	300	australiensis ( <i>Simocephalus</i> ) .....	491
<i>areolatus</i> ( <i>Chlorodius</i> ) .....	300	australiensis ( <i>Simosa</i> ) .....	491
Armadillidiidæ .....	444	australis ( <i>Cyzicus</i> ) .....	487
<i>Armadillo</i> .....	444	australis ( <i>Idomene</i> ) .....	545
armata ( <i>Cypris</i> ) .....	497	australis ( <i>Lepas</i> ) .....	564
armata ( <i>Squilla</i> ) .....	405	australis ( <i>Nyctiphanes</i> ) .....	399
		australis ( <i>Tiron</i> ) .....	454

	PAGE		PAGE
<i>austrina</i> (Paramoera) .....	456	<i>brevicauda</i> (Metridia) .....	535
<i>austrinus</i> (Atylus) .....	456	<i>brevicollis</i> (Caprella) .....	470
<i>austrinus</i> (Heterorhabdus) .....	538	<i>brevicornis</i> (Ampelisca) .....	450
Axiidae .....	367	<i>brevicornis</i> (Araneops) .....	450
		<i>brevicornis</i> (Calanus) .....	520
<i>bahumensis</i> (Cancer) .....	351	<i>brevipes</i> (Iphinoë) .....	410
<i>bahamensis</i> (Petrochirus) .....	351	<i>brevirostris</i> (Diogenes) .....	354
<i>Bairdia</i> .....	504	<i>Broteas</i> .....	531
<i>Bairdiidae</i> .....	503	<i>brunnea</i> (Niambia) .....	441
<i>balcanaris</i> (Coronula) .....	572	<i>bruzelii</i> (Mæra) .....	457
<i>balcanarum</i> (Tubicinella) .....	573	<i>bürgeri</i> (Palinurus) .....	374
Balanidae .....	567	<i>bürgeri</i> (Panulirus) .....	374
Balanus .....	567	Byblis .....	451
<i>banksii</i> (Ceratothoa) .....	425		
<i>banksii</i> (Cymothoa) .....	424	<i>cæruleus</i> (Penæus) .....	380
<i>barbata</i> (Homola) .....	347	<i>Cæsaromysis</i> .....	403
<i>barbata</i> (Sesarma) .....	318	<i>cafer</i> (Branchipus) .....	482
<i>barbatus</i> (Cancer) .....	347	<i>cafer</i> (Streptocephalus) .....	482
<i>barbatus</i> (Gnathochasmus) .....	318	<i>caffer</i> (Streptocephalus) .....	482
<i>barroisi</i> (Chydorus) .....	493	<i>Calamorrhynchus</i> .....	480
<i>barroisi</i> (Pleuroxus) .....	493	<i>Calanidae</i> .....	519
<i>batei</i> (Acanthephyra) .....	395	<i>Calanidea</i> .....	519
<i>Bathygyge</i> .....	436	<i>Calanus</i> .....	519
<i>bathyploous</i> (Camacho) .....	463	<i>Calappa</i> .....	333
<i>beaumontii</i> (Pentacheles) .....	377	<i>Calappidae</i> .....	333
<i>beaumontii</i> (Polychæles ?) .....	377	<i>Calastacus</i> .....	367
<i>belli</i> (Moina) .....	492	<i>calcarata</i> (Gnathophausia) .....	402
<i>bicornis</i> (Dromia) .....	344	<i>calceolus</i> (Balanus) .....	568
<i>bicornis</i> (Dromidia ?) .....	343	<i>Calcinus</i> .....	553
<i>bidens</i> (Alima) .....	408	<i>Caligida</i> .....	558
<i>bidentatus</i> (Phyllopus) .....	538	<i>Caligidea</i> .....	557, 561
<i>bihamata</i> (Kochlorine) .....	575	<i>Caligoida</i> .....	557
<i>bipinnata</i> (Candace) .....	539	<i>Caligus</i> .....	558
<i>bipinnata</i> (Candacia) .....	539	<i>Calliactites</i> .....	369
<i>bispinosa</i> (Conchœcia) .....	511	<i>Calliadne</i> .....	370
<i>bisulcatus</i> (Sergestes) .....	381	<i>Callianassa</i> .....	369
<i>Blastidae</i> .....	288	<i>Callianassidae</i> .....	369
<i>Bodotria</i> .....	410	<i>Callichirus</i> .....	369
<i>Bodotriidae</i> .....	409	<i>calmani</i> (Die), n. sp., Pls. 46b, 47	416
<i>boopis</i> (Cyamus) .....	473	<i>Calocalanus</i> .....	524
<i>Bopyridæ</i> .....	436	<i>Calypotomera</i> .....	489
<i>boscii</i> (Cleistostoma) .....	329	<i>Camacho</i> .....	463
<i>boscii</i> (Euplax) .....	329	<i>canaliculata</i> (Processa) .....	387
<i>boscii</i> (Macrophthalmus) .....	329	<i>Cancridæ</i> .....	310
<i>botte</i> (Orchestia) .....	458	<i>Candacia</i> .....	539
<i>bouvieri</i> (Parapagurus), n. sp., Pl. 43 .....	357	<i>Candacidae</i> .....	539
<i>brachiata</i> (Calanopia) .....	533	<i>Candaciidae</i> .....	539
<i>brachiata</i> (Pontella) .....	533	<i>Candonocypris</i> .....	501
<i>brachiatus</i> (Centropages) .....	533	<i>candonoides</i> (Candonocypris) .....	501
<i>brachyascos</i> (Conchœcia) .....	509	<i>candonoides</i> (Cypris) .....	501
<i>brachyascos</i> (Conchœcia) .....	509	<i>canthari</i> (Anchorella) .....	562
<i>Brachyscelus</i> .....	479	<i>canthari</i> (Lerneomyzon) .....	562
<i>Brachyura anomala</i> .....	341	<i>Canthocampidae</i> .....	546
<i>Brachyura genuina</i> .....	283	<i>Canthocampiinae</i> .....	546
<i>bradyana</i> (Lucicutia) .....	537	<i>Canthocampiidae</i> .....	546
<i>Branchiopoda</i> .....	481	<i>capensis</i> (Anilocra) .....	424
<i>Branchipodidae</i> .....	482	<i>capensis</i> (Astacus) .....	378
<i>Branchipodopsis</i> .....	483	<i>capensis</i> (Balanus) .....	568
<i>brasiliensis</i> (Erichthonius) .....	463	<i>capensis</i> (Crangon) .....	382
<i>brasiliensis</i> (Pyctilus) .....	463	<i>capensis</i> (Cypria) .....	497
<i>braunsi</i> (Phylloniscus) .....	438	<i>capensis</i> (Cypridina) .....	516, 517

	PAGE		PAGE
capensis (Cyprinotus) .....	498	chabrus ( <i>Cancer</i> ) .....	322
capensis (Cypris) .....	497	chabrus (Plagusia) .....	322
capensis (Diaptomus) .....	531	Chænostoma .....	329
capensis ( <i>Gebia</i> ) .....	370	Charybdis .....	306
capensis ( <i>Homarus</i> ) .....	379	Cheiriphotis .....	461
capensis ( <i>Iphimedia</i> ) .....	455	cheirura (Candacia) .....	540
capensis (Leander) .....	386	Chelura .....	463
capensis (Leptomysis) .....	404	Cheluridæ .....	463
capensis (Lysiosquilla) .....	406, 409	chevreuxi (Elasmopoides) .....	458
capensis ( <i>Metoponorthus</i> ) .....	441	chierchiæ (Centropages) .....	533
capensis (Neolithodes) .....	349	chierchiæ (Euconchæcia) .....	515
capensis (Niambia) .....	441	chierchiæ (Pyrocypris) .....	518
capensis (Orchestia) .....	458	chiltoni (Ampelisca) .....	451
capensis (Plagusia) .....	322	chiragra (Gonodactylus) .....	406
capensis (Pontogeneia) .....	455	chiragra ( <i>Squilla</i> ) .....	406
capensis ( <i>Simoccephalus</i> ) .....	491	chiragrus (Gonodactylus) .....	406
capensis (Simosa) .....	491	Chiridius .....	526
capensis (Sphæronella) .....	562	Chirundina .....	527
capensis (Tylos) .....	439	chirura (Candacia) .....	540
capensis (Upogebia) .....	370	Chloridella .....	405
capensis (Xestoleberis) .....	505	Chlorodopsis .....	300
Caprella .....	465	chlorophthalmus ( <i>Gelasimus</i> ) .....	327
Caprellidæ .....	464	chlorophthalmus ( <i>Uca</i> ) .....	327
Caprellidea .....	464	Chlorotoeus .....	393
Caprellina .....	470	Chondracanthidæ .....	560
Caprellinopsis .....	470	Choniostomatidæ .....	562
caputmortuum ( <i>Cancer</i> ) .....	344	Chthamalus .....	574
caputmortuum (Cryptodromia?) .....	344	chuni (Conchæcia) .....	515
caputmortuum ( <i>Dromia</i> ) .....	345	Chydoridæ .....	492
caputmortuum ( <i>Pagurus</i> ) .....	344	Chydorus .....	493
Carcinaspis .....	338	cieur (Caprella) .....	466
Carcinoplacidæ .....	312	Cinusa .....	425
Carcinoplax .....	313	Cirolana .....	421
Cardiosoma .....	325	Cirolanidæ .....	421
Cardisoma .....	325	Cladocera .....	489
Caridea .....	381	Cladocopa .....	507
Caridina .....	393	clathratula (Alonella) .....	494
carnifex ( <i>Cancer</i> ) .....	325	clausi (Cytherura) .....	506
carnifex (Cardisoma) .....	325	clausi (Lucicutia) .....	537
castanea (Cypria) .....	497	clausii (Conchæcia) .....	511
castanea (Cypridina) .....	516	clausii ( <i>Halocypris</i> ) .....	511
cataphractus (Ægeon) .....	383	clausii ( <i>Leuckartia</i> ) .....	536
cataphractus ( <i>Cancer</i> ) .....	383	clausii (Lucicutia) .....	536
catenata (Sesarma) .....	322	clausii ( <i>Microconchæcia</i> ) .....	511
catenatum (Sesarma) .....	322	Clausocalanus .....	524
catenula (Anthura) .....	420	clavimana (Ocylope) .....	324
Catometopa .....	312	clavimana (Plagusia) .....	324
catula (Candace) .....	540	clavimanus ( <i>Acanthopus</i> ) .....	324
catula (Candacia) .....	540	Cleistostoma .....	328
caudata (Cypridina) .....	517	Cleistotoma .....	328
Cecrops .....	558	Clibanarius .....	352
Centropages .....	533	clibanarius ( <i>Cancer</i> ) .....	352
Centropagidæ .....	530	clibanarius (Clibanarius) .....	352
cephalodisci (Zanclopus) .....	550	clibanarius (Pagurus) .....	352
cephalotes (Nerocila) .....	423	clypeatus (Planes) .....	320
Ceradocus .....	456	cærulea (Trapezia) .....	304
Ceratophthalma (Ocylope) .....	326	coleoptrata ( <i>Dinematura</i> ) .....	559
ceratophthalma (Ocylope) .....	326	coleoptrata ( <i>Dinemoura</i> ) .....	559
ceratophthalmus ( <i>Cancer</i> ) .....	326	coleoptratus (Echthrogaleus) .....	559
ceratophthalmus (Ocylope) .....	326	colletti (Alonopsis) .....	494
Ceratothoa .....	424	communis (Calanus) .....	520
Ceriodaphnia .....	490	compressipes (Atergatis) .....	296



	PAGE		PAGE
Conæa .....	556	curta ( <i>Candace</i> ) .....	539
Conchoderma .....	565	curta ( <i>Candacia</i> ) .....	539
Conchæcetes .....	346	curta ( <i>Conchæcia</i> ) .....	510
Conchæcia .....	508	curta ( <i>Pontella</i> ) .....	541
Conchophylla .....	485	curta ( <i>Pontellina</i> ) .....	542
Conchostraca .....	485	curta ( <i>Pontellopsis</i> ) .....	541
conifera ( <i>Oncæa</i> ) .....	555	Cyamidæ .....	471
Conilorpheus .....	422	Cyamidea .....	464
consanguinea ( <i>Liljeborgia</i> ) .....	454	Cyamus .....	471
consobrinus ( <i>Acanthonyx</i> ) .....	288	Cyclaspis .....	413
Copepoda .....	518	Cyclocypis .....	498
cor ( <i>Dichelaspis</i> ) .....	565	Cyclograpsus .....	318
cor ( <i>Octolasmis</i> ) .....	565	Cycloidura .....	431
cordimana ( <i>Ocypode</i> ) .....	326	Cyclometopa .....	293
cornudo ( <i>Cancer</i> ) .....	291	Cyclopidæ .....	547
cornuta ( <i>Laophonte</i> ) .....	546	Cyclopidea .....	547
cornuta ( <i>Pericera</i> ) .....	291	Cyelops .....	547
cornutus ( <i>Calanus</i> ) .....	523	<i>Cyclura</i> .....	431
cornutus ( <i>Rhincalanus</i> ) .....	523	Cylindroleberis .....	517
cornutus ( <i>Rhinocalanus</i> ) .....	523	Cymodoce .....	429
Coronula .....	571	cymodoce ( <i>Cancer</i> ) .....	304
Corophiæ .....	462	cymodoce ( <i>Trapezia</i> ) .....	304
corpulenta ( <i>Cypris</i> ) .....	496	Cymodocella .....	430
Corycæus .....	553	Cymothoidæ .....	423
<i>Corycæide</i> .....	551	Cyphocaris .....	448
Corystidæ .....	311	Cypretta .....	498
costatus ( <i>Diogenes</i> ) .....	355	Cypria .....	497
Crangon .....	382	Cypricerus .....	500
Crangonidæ .....	382	Cyprididæ .....	495
crassicornis ( <i>Cyclops</i> ) .....	547	Cypridina .....	516
crassimanus ( <i>Achelous</i> ) .....	308	<i>Cypridinadæ</i> .....	516
crassimanus ( <i>Alpheus</i> ) .....	389	Cypridinidæ .....	516
crassipes ( <i>Iphinoë</i> ) Pl. 45 .....	412	Cypridopsis .....	498
crassus ( <i>Eucalanus</i> ) .....	522	Cyprinotus .....	497
craticula ( <i>Cythere</i> ) .....	505	Cypris .....	495
crenata ( <i>Thalamita</i> ) .....	309	Cyproniscidæ .....	436
crenatus ( <i>Balanus</i> ) .....	569	Cyproniscus .....	436
<i>cristimana</i> ( <i>Mursia</i> ) .....	334	Cystisoma .....	474
cristimanus ( <i>Mursia</i> ) .....	334	Cystisomatidæ .....	474
crossophori ( <i>Cyproniscus</i> ) ..	437, 518	Cythere .....	504
Crossophorus .....	518	Cytherella .....	506
cruciatus ( <i>Cancer</i> ) .....	306	Cytherellidæ .....	506
cruciatus ( <i>Charybdis</i> ) .....	306	Cytheridæ .....	504
cryptodactylus ( <i>Hyperoche</i> ) .....	476	cytheropteroides ( <i>Cythere</i> ) .....	504
Cryptodromia .....	344	Cytherura .....	506
Cryptopontius .....	557	Cyzicidæ .....	486
Cteatessa .....	424	Cyzicus .....	487
ctenophora ( <i>Conchæcia</i> ) .....	512		
Cubaridæ .....	444	dactylops ( <i>Katerythrops</i> ) .....	404
<i>Cubaris</i> .....	445	danæ ( <i>Acartia</i> ) .....	542
cucullata ( <i>Archiconchæcia</i> ) .....	516	danæ ( <i>Corycæus</i> ) .....	554
cucullata ( <i>Conchæcissa</i> ) .....	516	danæ ( <i>Scolecithrix</i> ) .....	529
<i>Cuma</i> .....	409	danæ ( <i>Undina</i> ) .....	529
<i>Cumacea</i> .....	409	Daphnia .....	489
cuneatus ( <i>Cypricerus</i> ) .....	500	<i>Daphnidæ</i> .....	489
euphæus ( <i>Cancer</i> ) .....	336	Daphniidæ .....	489
euphæus ( <i>Persephona</i> ) .....	336	daphnoides ( <i>Conchæcia</i> ) .....	515
cuspidata ( <i>Amphipronoë</i> ) .....	479	daphnoides ( <i>Conchæcilla</i> ) .....	515
cursor ( <i>Cancer</i> ) .....	326	<i>Dardanus</i> .....	350
cursor ( <i>Ceratophthalma</i> ) .....	326	darwini ( <i>Calanus</i> ) .....	520
cursor ( <i>Ocypoda</i> ) .....	326	darwini ( <i>Coronula</i> ) nom. nov. ....	572
cursor ( <i>Ocypode</i> ) .....	326	darwini ( <i>Calanus</i> ) .....	520

	PAGE		PAGE
darwinii ( <i>Undina</i> ) .....	520	Dromidia .....	342
dehaanii ( <i>Porcellana</i> ) .....	361	Dromiidae .....	342
dehaanii ( <i>Xantho</i> ) .....	299	dubia ( <i>Liljeborgia</i> ) .....	454
Dehaanius .....	287	dubius ( <i>Eusirus</i> ) .....	454
dentatus ( <i>Acanthonyx</i> ) .....	287	dumerilii ( <i>Acherusia</i> ) .....	423
dentatus ( <i>Cancer</i> ) .....	298	dumerilii ( <i>Rocinela</i> ) .....	423
dentatus ( <i>Chthamalus</i> ) .....	574	dumerilii ( <i>Sphaeroma</i> ) .....	432
dentatus ( <i>Etisus</i> ) .....	298	duvaucellii ( <i>Erichthus</i> ) .....	408
dentatus ( <i>Grapsillus</i> ) .....	304	duvaucellii ( <i>Erichthus</i> ) .....	408
dentatus ( <i>Dehaanius</i> ) .....	287	duvaucellii ( <i>Lysierichthus</i> ) .....	408
denticis ( <i>Anchorella</i> ) .....	562	Dynomene .....	346
denticis ( <i>Lerneomyzon</i> ) .....	562	Dynomenidae .....	346
depressa ( <i>Plagusia</i> ) .....	323	Dyspontiidae .....	557
depressa ( <i>Thelphusa</i> ) .....	294		
depressus ( <i>Potamonautes</i> ) .....	294	Ebalia .....	337
Deto .....	444	echinata ( <i>Cypridopsis</i> ) .....	499
Detonidae .....	444	echinata ( <i>Deto</i> ) .....	444
diacantha ( <i>Naxia</i> ) .....	285	echinulata ( <i>Conchœcia</i> ) .....	511
diacanthus ( <i>Halimus</i> ) .....	285	echinulata ( <i>Microcondœcia clausii</i> var.) .....	511
diadema ( <i>Coronula</i> ) .....	571	Echthrogaleus .....	559
diadema ( <i>Lepas</i> ) .....	571	Ectoeyclops .....	548
Diaptomidæ .....	530	edwardsii ( <i>Alpheus</i> ) .....	389
Diaptomus .....	531	edwardsii ( <i>Athanasus</i> ) .....	389
Diastylidae .....	418	edwardsii ( <i>Cleistostoma</i> ) .....	328
Diastylis .....	418	edwardsii ( <i>Cleistotoma</i> ) .....	328
Diastylopsis .....	415	edwardsii ( <i>Idotea</i> ) .....	433
Dic .....	415	egagropila ( <i>Dromia</i> ) .....	345
<i>Dichelaspis</i> .....	565	<i>Egeon</i> .....	383
Dicidae .....	415	Elamena .....	332
dilatata ( <i>Ligia</i> ) .....	437	Elasmopoides .....	458
dilatata ( <i>Lygia</i> ) .....	437	Elasmopus .....	457
dimorphus ( <i>Eupagurus</i> ) .....	356	elegans ( <i>Calcinus</i> ) .....	353
dimorphus ( <i>Parapagurus</i> ) .....	356	elegans ( <i>Conchœcia</i> ) .....	509
Diogenes .....	353	elegans ( <i>Latreillia</i> ) .....	347
<i>diogenes</i> ( <i>Cancer</i> ) .....	355	<i>elegans</i> ( <i>Marestia</i> ) .....	348
Diploexochus .....	445	elegans ( <i>Paenirus</i> ) .....	353
<i>Diptychus</i> .....	342	elisabethæ ( <i>Scyllarides</i> ) .....	372
discaudata ( <i>Temora</i> ) .....	534	elisabethæ ( <i>Scyllarus</i> ) .....	372
disjunctipes ( <i>Nasinatalis</i> ) n. sp. Pl. 42 .....	340	elisabethæ ( <i>Cyzicus</i> ) .....	487
<i>dispar</i> ( <i>Apus</i> ) .....	485	elisabethæ ( <i>Estheria</i> ) .....	487
dispar ( <i>Macrocypris</i> ) .....	503	elongatus ( <i>Acontiophorus</i> ) .....	557
dispersa ( <i>Galathea</i> ) .....	364	elongatus ( <i>Calanus</i> ) .....	521
<i>distincta</i> ( <i>Idotea</i> ) .....	433	elongatus ( <i>Eucalanus</i> ) .....	521
<i>Dithyrus</i> .....	477	elongatus ( <i>Scottocheres</i> ) .....	557
dolichocephala ( <i>Daphnia</i> ) .....	490	<i>emarginata</i> ( <i>Thelphusa</i> ) .....	295
dolichodactylus ( <i>Macrobrachium</i> ) .....	385	Emerita .....	366
dolichodactylus ( <i>Palæmon</i> ) .....	385	emerita ( <i>Hippa</i> ) .....	366
dolichodactylus ( <i>Parapalæmon</i> ) .....	385	emerita ( <i>Pontella</i> ) .....	542
Dorippe .....	339	emerita ( <i>Pontellina</i> ) .....	542
Dorippidae .....	339	emerita ( <i>Pontellopsis</i> ) .....	542
dormia ( <i>Cancer</i> ) .....	342	emeritus ( <i>Astacus</i> ) .....	366
dormia ( <i>Dromia</i> ) .....	342	emeritus ( <i>Cancer</i> ) .....	366
dorsoserrata ( <i>Cypridina</i> ) .....	517	emeritus ( <i>Emerita</i> ) .....	366
Dorynchus .....	285	emeritus ( <i>Hippa</i> ) .....	366
Dotilla .....	329	ensifera ( <i>Hippolyte</i> ) .....	390
<i>Dotu</i> .....	329	ensiferus ( <i>Hippolyte</i> ) .....	390
dregei ( <i>Streptocephalus</i> ) .....	483	Entomostraca .....	481
dromedaria ( <i>Cytherella</i> ) .....	506	Eocuma .....	414
Dromia .....	342	Epialtus .....	288
Dromiacea .....	341	Epicaridea .....	436
<i>Dromidea</i> .....	342	epispænna ( <i>Cypricercus</i> ) .....	501



	PAGE		PAGE
Epixanthus.....	301	flammea (Calappa).....	333
equilibra (Caprella) .....	466	flammeus (Cancer) .....	333
Erichthus .....	408	flava (Pontocypris).....	503
Erichthonius .....	43	flavescens (Armadillo) .....	445
Eriphia .....	302	flavescens (Cubaris) .....	445
erraticus (Cyamus) .....	472	flavescens (Diploexochus).....	445
Eryonidæ .....	377	flavicornis (Leuckartia).....	536
Eryonidea .....	377	flavicornis (Lucicutia) .....	536
Estheria .....	487	flavipes (Goniopsis) .....	317
Estheriidae .....	486	floridus (Atergatis) .....	296
Etisus .....	298	fluviatilis (Cirolana) .....	422
Eubelidæ .....	443	forcipatus (Tetrathyrus) .....	478
Eubelum .....	443	formicarum (Diploexochus) .....	447
Eucalanus .....	521	fragilis (Xanthocalanus) .....	530
Euchæta .....	528	frontalis (Epixanthus) .....	301
Euchirella .....	527	frontalis (Eudromia) .....	346
Euconchœcia .....	515	frontalis (Ozius) .....	301
Eudromia .....	346	fulgens (Oniscus) .....	551
eulimene (Sesarma) .....	322	fulgens (Sapphirina) .....	551
Eupagurus .....	358	furcata (Catopia) .....	533
Eupalemon .....	384	furcata (Stenocionops) .....	291
Euphausia .....	396	furcatus (Cancer) .....	291
Euphausiacea.....	395	furcatus (Centropages) .....	533
Euphausiide .....	396	furcatus (Clausocalanus) .....	525
Euplax.....	329	furcatus (Drepanopus) .....	525
Eurycarinus .....	302	furcifer (Corycæus) .....	554
Eurycepris.....	496, 497	furcillatus (Lispognathus).....	286
Eurydice .....	421	fusca (Ampelisca) ....	451
Eurydicidæ.....	421		
Euryome .....	289	Gætanus.....	526
Eurystheus.....	460	Galacantha .....	364
Eutyphidæ .....	477	Galathea .....	362
Euxanthus .....	297	Galatheidæ .....	362
excavata (Harpinia) .....	452	Galatheidæ.....	360
exilis (Cythere) .....	504	gamianus (Paguristes) .....	351
Exodromidia .....	344	gamianus (Pagurus) .....	351
Exosphæroma .....	428	Gammaridæ .....	456
exspinosa (Daphnia).....	491	Gammarideæ .....	447
exspinosa (Simosa) .....	491	Gammarus .....	456
exspinosus (Monoculus).....	491	Gastrosaccidæ .....	402
exspinosus (Simocephalus) .....	491	Gastrosaccinæ .....	402
extricatus (Diogenes), nom. nov.	355	gaussi (Pontocypris) .....	503
		Gebiopsis .....	370
falcatus (Podocerus) .....	462	Gecarcinidæ .....	324
falcifer (Broteas) .....	532	Gecarcinus .....	324
falcifer (Paradiaptomus) .....	532	gemma (Sapphirina).....	552
falcifer (Stenorynchus) .....	284	genuina (Brachyura).....	283
falcifera (Lovénula) .....	532	genuina (Isopoda) .....	419
falcifera (Macropodia) .....	284	genuina (Macrura).....	366
falsa (Caprella) .....	467	Geocarcinidæ .....	324
fascicularis (Cancer) .....	321	Geocarcinus .....	324
fascicularis (Lepas) .....	564	geometricum (Hymenosoma) .....	332
fascicularis (Pisa) .....	288	Gerufa .....	442
fenestrata (Dotilla) .....	329	Geryon .....	313
ferruginea (Trapezia) .....	304	gibber (Acrocalanus) .....	524
fimbriatus (Cyclops) .....	547	gibsoni (Chydorus).....	493
finmarchicus (Calanus).....	519	gibsoni (Cyclops) .....	518
finmarchicus (Monoculus).....	519	giesbrechti (Aethidius) .....	526
fischerii (Orchestia) .....	459	giesbrechti (Ætidius).....	525
fischerii (Orchestoidea).....	459	gigas (Exosphæroma) .....	428
flabellucostata (Cythere) .....	504	gilehristi (Palinurus) .....	374
Flabellifera .....	419	glaberrima (Tetralia).....	305

	PAGE		PAGE
<i>glaberrima</i> ( <i>Trapezia</i> ) .....	305	<i>hepaticus</i> ( <i>Cancer</i> ) .....	333
<i>glaberrimus</i> ( <i>Cancer</i> ) .....	305	<i>herbstii</i> ( <i>Calcinus</i> ) .....	353
<i>glabra</i> ( <i>Alona</i> ) .....	494	<i>hertwigi</i> ( <i>Seyramathia</i> ) .....	289
<i>glabrata</i> ( <i>Ligia</i> ) .....	437	<i>Heterochacta</i> .....	537
<i>glabrata</i> ( <i>Lygia</i> ) .....	437	<i>heterochir</i> ( <i>Pilumnoplax</i> ) .....	314
<i>Glaucothoe</i> .....	360	<i>heterochir</i> ( <i>Pilumnus</i> ) .....	314
<i>globosa</i> ( <i>Halocypria</i> ) .....	508	<i>heterodon</i> ( <i>Atelecyclus</i> ) .....	311
<i>globosa</i> ( <i>Halocypris</i> ) .....	508	<i>Heterorhabdus</i> .....	537
<i>globularis</i> ( <i>Gunenotophorus</i> ) .....	550	<i>hexaceros</i> ( <i>Diastylis</i> ) .....	418
<i>globuloides</i> ( <i>Proteocypris</i> ?) .....	500	<i>Hexapus</i> .....	315
<i>gloriosus</i> ( <i>Sergestes</i> ) .....	381	<i>hillii</i> ( <i>Lepas</i> ) .....	563
<i>Glyphocrangon</i> .....	387	<i>hillii</i> ( <i>Pentelasmis</i> ) .....	563
<i>Glyphocrangonidæ</i> .....	387	<i>Hippidæ</i> .....	365
<i>Glyptidotea</i> .....	434	<i>Hippidea</i> .....	365
<i>Gnathophausia</i> .....	402	<i>Hippolytidæ</i> .....	390
<i>gonagra</i> ( <i>Eriphia</i> ) .....	303	<i>Hippolyte</i> .....	390
<i>Goneplacidæ</i> .....	312	<i>Hippomedon</i> .....	449
<i>Goneplax</i> .....	312	<i>hirsuta</i> ( <i>Conchoecia</i> ) .....	509
<i>Goniograpsus</i> .....	319	<i>hirsuta</i> ( <i>Nahia</i> ) .....	442
<i>Gonodactylus</i> .....	406	<i>hirsuta</i> ( <i>Niambia</i> ) .....	442
<i>gracile</i> ( <i>Pleuromma</i> ) .....	536	<i>hirsuta</i> ( <i>Philoscia</i> ) .....	442
<i>gracilipes</i> ( <i>Ligia</i> ) .....	438	<i>hirsutipes</i> ( <i>Lembos</i> ) .....	460
<i>gracilis</i> ( <i>Acrocalanus</i> ) .....	524	<i>hirsutissima</i> ( <i>Dromia</i> ) .....	342
<i>gracilis</i> ( <i>Cyamus</i> ) .....	473	<i>hirsutissima</i> ( <i>Dromidia</i> ) .....	342
<i>gracilis</i> ( <i>Pleuromamma</i> ) .....	536	<i>hirticornis</i> ( <i>Gerufa</i> ) .....	442
<i>gracilis</i> ( <i>Pontophilus</i> ) .....	383	<i>hirtipes</i> ( <i>Cirolana</i> ) .....	421
<i>gracilis</i> ( <i>Setella</i> ) .....	543	<i>hirtipes</i> ( <i>Edotia</i> ) .....	434
<i>gracilis</i> ( <i>Streptocephalus</i> ) .....	483	<i>hirtipes</i> ( <i>Idotea</i> ) .....	434
<i>grandis</i> ( <i>Bathygyge</i> ) .....	436	<i>hirtipes</i> ( <i>Syndotea</i> ) .....	434
<i>granulata</i> ( <i>Actæa</i> ) .....	299	<i>hirtissima</i> ( <i>Dromia</i> ) .....	342
<i>granulatus</i> ( <i>Cancer</i> ) .....	299	<i>hispida</i> ( <i>Cæsaromysis</i> ) .....	404
<i>granulatus</i> ( <i>Charybdis</i> ) .....	307	<i>hodgsoni</i> ( <i>Branchipodopsis</i> ) .....	483
<i>granulatus</i> ( <i>Pagurus</i> ) .....	351	<i>hodgsoni</i> ( <i>Megalocypris</i> ) .....	502
<i>granulatus</i> ( <i>Petrochirus</i> ) .....	351	<i>holmesi</i> ( <i>Eurystheus</i> ) .....	461
<i>granulatus</i> ( <i>Pilumnus</i> ) .....	302	<i>Homarus</i> .....	378
<i>granulatus</i> ( <i>Polychæles</i> ) .....	378	<i>homochir</i> ( <i>Atylus</i> ) .....	455
<i>granulatus</i> ( <i>Tylos</i> ) .....	439	<i>homochir</i> ( <i>Nototropis</i> ) .....	455
<i>Grapsidæ</i> .....	316	<i>Homola</i> .....	347
<i>Grapsillus</i> .....	303	<i>Homolidæ</i> .....	347
<i>Grapsus</i> .....	317	<i>Hoplophoridæ</i> .....	394
<i>grapsus</i> ( <i>Cancer</i> ) .....	317	<i>horrida</i> ( <i>Parthenope</i> ) .....	292
<i>gregaria</i> ( <i>Cypridopsis</i> ) .....	499	<i>horridus</i> ( <i>Cancer</i> ) .....	292
<i>gregaria</i> ( <i>Potamocypris</i> ) .....	499	<i>hyalinus</i> ( <i>Cyclops</i> ) .....	548
<i>gregaria</i> ( <i>Thysanoessa</i> ) .....	399	<i>hyalophyllum</i> ( <i>Conchæcia</i> ) .....	512
<i>grossimanus</i> ( <i>Apseudes</i> ) .....	419	<i>hydrophilus</i> ( <i>Cancer</i> ) .....	297
<i>Gunenotophorus</i> .....	550	<i>hydrophilus</i> ( <i>Xantho</i> ) .....	297
<i>güntheri</i> ( <i>Achæopsis</i> ) .....	285	<i>Hymenosoma</i> .....	331
<i>guttata</i> ( <i>Alona</i> ) .....	494	<i>Hymenosomatidæ</i> .....	331
<i>Gymnophylla</i> .....	481	<i>Hymenosomidæ</i> .....	331
<i>Gymnoplea</i> .....	519	<i>Hyperia</i> .....	475
		<i>Hyperidea</i> .....	473
<i>haddoni</i> ( <i>Conchæcia</i> ) .....	511	<i>Hyperiidæ</i> .....	475
<i>Halimede</i> .....	298	<i>Hyperidea</i> .....	473
<i>Halimus</i> .....	285	<i>Hyperoche</i> .....	476
<i>Halocypridæ</i> .....	507		
<i>Halocypris</i> .....	507	<i>Ibaccus</i> .....	372
<i>Harpacticidæ</i> .....	543	<i>Ibachus</i> .....	372
<i>Harpacticoida</i> .....	542	<i>Ibacus</i> .....	372
<i>Harpinia</i> .....	452	<i>Idomene</i> .....	545
<i>Hemilamprops</i> .....	414	<i>Idotea</i> .....	432
<i>Hemityphis</i> .....	477	<i>Idoteidæ</i> .....	432
<i>hepatica</i> ( <i>Calappa</i> ) .....	333	<i>Idya</i> .....	544

	PAGE		PAGE
<i>Idycea</i> .....	544	<i>Læmargus</i> .....	559
<i>Idyide</i> .....	544	<i>Læmatophilus</i> .....	464
<i>imbricata</i> ( <i>Conchæcia</i> ) .....	514	<i>lævifrons</i> ( <i>Paramunna</i> ), n. sp., Pl. 46A .....	435
<i>imbricata</i> ( <i>Conchocissa</i> ) .....	514	<i>lævigata</i> ( <i>Anthura</i> ) .....	420
<i>imbricata</i> ( <i>Halocypris</i> ) .....	514	<i>lævigatum</i> ( <i>Sphyrion</i> ) .....	460
<i>imbricata</i> ( <i>Meinertia</i> ) .....	421	<i>lævigatus</i> ( <i>Sphyrion</i> ) .....	560
<i>imbricatus</i> ( <i>Oniscus</i> ) .....	424	<i>lævimana</i> ( <i>Eriphia</i> ) .....	303
<i>Inachidæ</i> .....	284	<i>lævimanus</i> ( <i>Calcinus</i> ) .....	353
<i>Inachus</i> .....	284	<i>lævimanus</i> ( <i>Pagurus</i> ) .....	353
<i>incertus</i> ( <i>Chlorotocus</i> ) .....	393	<i>lævipes</i> ( <i>Caprella</i> ) .....	467
<i>indica</i> ( <i>Idotea</i> ) .....	432	<i>lævis</i> ( <i>Anatifa</i> ) .....	563
<i>indica</i> ( <i>Thelphusa</i> ) .....	295	<i>lagostoma</i> ( <i>Gecarcinus</i> ) .....	325
<i>indicator</i> ( <i>Sapphirina</i> ) .....	551	<i>lalandii</i> ( <i>Idotea</i> ) .....	433
<i>inermis</i> ( <i>Candacia</i> ) .....	540	<i>lalandii</i> ( <i>Jasus</i> ) .....	374
<i>inermis</i> ( <i>Cypris</i> ) .....	496	<i>lalandii</i> ( <i>Palinostus</i> ) .....	375
<i>inflata</i> ( <i>Halocypris</i> ) .....	507	<i>lalandii</i> ( <i>Palinurus</i> ) .....	374
<i>inflata</i> ( <i>Thelphusa</i> ) .....	294	<i>Lambrus</i> .....	292
<i>inflatus</i> ( <i>Potamonautes</i> ) .....	294	<i>lamellatus</i> ( <i>Broteas</i> ) .....	532
<i>innominatus</i> ( <i>Cryptopontius</i> ) .....	557	<i>lamellatus</i> ( <i>Paradiaptomus</i> ) .....	532
<i>insignis</i> ( <i>Conchæcia</i> ) .....	514	<i>Lampropidæ</i> .....	414
<i>intumescens</i> ( <i>Cypris</i> ) .....	496	<i>lanata</i> ( <i>Dorippe</i> ) .....	339
<i>inversa</i> ( <i>Uca</i> ) .....	323	<i>lanatus</i> ( <i>Cancer</i> ) .....	339
<i>inversus</i> ( <i>Gelasimus</i> ) .....	323	<i>lanceolatum</i> ( <i>Exosphaeroma</i> ) .....	428
<i>Iphinoë</i> .....	410	<i>Laophonte</i> .....	546
<i>ippeus</i> ( <i>Ocypode</i> ) .....	326	<i>Laophontidæ</i> .....	546
<i>Iscara</i> .....	487	<i>latens</i> ( <i>Pseudodromia</i> ) .....	345
<i>Isoeypris</i> .....	502	<i>latifrons</i> ( <i>Euphausia</i> ) .....	398
<i>isodactyla</i> ( <i>Gebia</i> ) .....	371	<i>latifrons</i> ( <i>Pseudeuphausia</i> ) .....	398
<i>isodactyla</i> ( <i>Gebiopsis</i> ) .....	371	<i>Latreillia</i> .....	347
<i>Iso-poda anomala</i> .....	418	<i>Latreillidæ</i> .....	347
<i>Iso-poda genuina</i> .....	419	<i>latreillii</i> ( <i>Cecrops</i> ) .....	558
<i>japonica</i> ( <i>Charybdis</i> ) .....	306	<i>latreillii</i> ( <i>Idotea</i> ) .....	432
<i>Jassidæ</i> .....	462	<i>Latreillidæ</i> .....	347
<i>Jassa</i> .....	462	<i>Leander</i> .....	386
<i>Jasus</i> .....	374	<i>Leiolophus</i> .....	324
<i>jurinii</i> ( <i>Sphaeroma</i> ) .....	427	<i>Lemboides</i> .....	460
<i>Katerythrops</i> .....	404	<i>Lembos</i> .....	460
<i>kingi</i> ( <i>Scapholeberis</i> ) .....	491	<i>Leontocaris</i> .....	391
<i>kingsleyi</i> ( <i>Brachygrapsus</i> ) .....	314	<i>Lepadidæ</i> .....	563
<i>kingsleyi</i> ( <i>Litocheira</i> ) .....	314	<i>Lepas</i> .....	563
<i>kladophoros</i> ( <i>Antarcturus</i> ) .....	435	<i>lepidactylus</i> ( <i>Macrobrachium</i> ) .....	386
<i>Kochlorine</i> .....	575	<i>lepidactylus</i> ( <i>Macroterochelir</i> ) .....	386
<i>Kochlorinidæ</i> .....	575	<i>lepidactylus</i> ( <i>Palæmon</i> ) .....	386
<i>kraussi</i> ( <i>Callianassa</i> ) .....	369	<i>lepralioides</i> ( <i>Cythere</i> ) .....	505
<i>kraussi</i> ( <i>Callichirus</i> ) .....	369	<i>Leptestheria</i> .....	486, 488
<i>Kraussia</i> .....	310	<i>Leptestheriidæ</i> .....	486
<i>kraussiana</i> ( <i>Hippolyte</i> ) .....	391	<i>Leptomysis</i> .....	404
<i>kraussianus</i> ( <i>Virbius</i> ) .....	391	<i>Lernæidæ</i> .....	560
<i>krohnii</i> ( <i>Euphausia</i> ) .....	397	<i>Lernæomyzon</i> .....	562
<i>krohnii</i> ( <i>Thysanopoda</i> ) .....	397	<i>Lernæopodidæ</i> .....	561
<i>kuhli</i> ( <i>Ocypoda</i> ) .....	327	<i>Lerneomizon</i> .....	561
<i>kuhli</i> ( <i>Ocypode</i> ) .....	327	<i>Lerneomyzon</i> .....	561
<i>kyrtophora</i> ( <i>Conchæcia</i> ) .....	510	<i>Lerneopoda</i> .....	561
<i>Labidocera</i> .....	542	<i>Lerneopodidæ</i> .....	561
<i>labidolepta</i> ( <i>Galathea</i> ) .....	362	<i>Lerneopodidea</i> .....	561
<i>lacerta</i> ( <i>Conchæcilla</i> ) .....	515	<i>Leucisca</i> .....	338
<i>lactea</i> ( <i>Ocypode</i> ) .....	327	<i>leuckarti</i> ( <i>Cyclops</i> ) .....	547
<i>lactea</i> ( <i>Uca</i> ) .....	327	<i>Leucosiadæ</i> .....	335
<i>lacteus</i> ( <i>Gelasimus</i> ) .....	327	<i>Leucosidæ</i> .....	335
		<i>Leucosiidæ</i> .....	335
		<i>Leucothoe</i> .....	453



	PAGE		PAGE
Leucothoidæ .....	452	Lysianassa .....	449
Leydigia .....	493	Lysianassidæ .....	447
lichtensteinii (Glyptidotea) .....	434	Lysierichthus .....	408
lichtensteinii ( <i>Idotea</i> ) .....	434	<i>Lysioerichthus</i> .....	408
Ligia .....	437	Lysiosquilla .....	406
Ligiidæ .....	437		
lignorum ( <i>Cymothoa</i> ) .....	426	macgillivrayi (Leptestheria).....	488
lignorum (Limnoria).....	426	<i>macguillivrayi</i> ( <i>Estheria</i> ).....	488
Liljeborgia .....	453	macleaii ( <i>Acanthonyx</i> ) .....	288
Liljeborgiidae .....	453	macleaii (Dehaan) .....	288
<i>Limnetidæ</i> .....	486	<i>Macrobrachium</i> .....	385
<i>Limnetis</i> .....	486	<i>macrocephala</i> (Sphæroma) .....	432
Limnoria .....	426	macrocephalum (Sphæroma) .....	432
Limnoriidæ .....	426	Macrocypris.....	502
Liomera .....	296	macrophthalmus (Amaryllis) .....	448
<i>Liolophus</i> .....	324	Macropodia .....	284
<i>Lispognathus</i> .....	285	Macroterochair .....	385
Lithodidæ .....	349	<i>Macrothricidæ</i> .....	492
Litochaira .....	314	Macrothrix .....	492
<i>Litochira</i> .....	314	Macrotrichidæ .....	492
litterata (Varuna) .....	319	Macrura anomala .....	349
<i>litteratus</i> ( <i>Cancer</i> ) .....	319	Macrura genuina .....	366
Livoneca .....	425	Macrura normalia .....	381
longicollis ( <i>Caprella</i> ).....	470	maculata ( <i>Cytherideis</i> ) .....	503
longicollis ( <i>Caprellina</i> ) .....	470	maculata (Lysiosquilla) .....	406
longicollis ( <i>Caprellinopsis</i> ) .....	471	maculata (Macrocypris) .....	503
longicorne (Stylocheiron) .....	400	maculata ( <i>Squilla</i> ).....	406
longicornis ( <i>Cirolana</i> ) .....	421	maculata (Trapezia) .....	304
longicornis (Euchæta) .....	528	maculatus (Cypricerus) .....	501
longicornis (Eurydice) .....	421	<i>maculatus</i> ( <i>Grapsillus</i> ) .....	304
longimana (Eurynome).....	289	maculatus (Grapsus) .....	317
longimanus (Carcinoplax).....	313	maculatus ( <i>Pagurus</i> ).....	317
longimanus ( <i>Curtonotus</i> ) .....	313	maculatus (Paratyphis).....	478
longimanus (Hippomedon) .....	449	Mæra .....	457
longimanus ( <i>Platamon</i> ).....	449	magna (Conchæcia) .....	513
longipes (Diploexochus) .....	446	<i>Maïidæ</i> .....	290
longipes (Helice?) .....	322	major ( <i>Gebia</i> capensis var.) .....	370
longipes (Sesarma).....	322	major ( <i>Nautilograpsus</i> ).....	320
longirostris (Glyphocrangon) .....	388	major ( <i>Undeuchæta</i> ) .....	527
longirostris ( <i>Rhachocaris</i> ).....	388	major (Undeuchæta) .....	527
longispinis (Calastacus).....	367	makrodaetylos (Metaprotella), n. sp., Pl. 48a .....	469
Lophogaster .....	401	Mamaia .....	290
Lophogastridæ .....	401	Mamaliidæ .....	290
lophura (Conchæcia) .....	512	Marestia .....	348
loricata (Conchæcia) .....	512	marginatus (Atergatis) .....	297
<i>Lovénula</i> .....	532	marginatus (Carcinaspis) .....	338
Loxconcha .....	505	marginepapillosa (Niambia).....	442
Lubbockia .....	556	marina (Euchæta) .....	528
lubricum (Eubelum) .....	444	marina (Phtisica) .....	468
lucens (Euphausia) .....	397	<i>marinus</i> ( <i>Cyclops</i> ) .....	528
lucens (Metridia) .....	535	martensii ( <i>Menippe</i> ).....	300
Lucicutia.....	536	martensii (Pilodius) .....	300
lunaris ( <i>Cancer</i> ).....	335	martia (Plesionika) .....	392
lunaris (Matuta).....	335	<i>martius</i> ( <i>Pandalus</i> ) .....	392
Lupa .....	307	mathæi (Elamena).....	333
Lycæidæ .....	479	mathæi ( <i>Hymenosoma</i> ) .....	333
<i>Lygia</i> .....	437	<i>mathei</i> ( <i>Hymenosoma</i> ) .....	333
Lynceidæ .....	486	Matuta .....	335
<i>Lynceidæ</i> .....	492	Matutidæ .....	335
Lynceus .....	486	<i>Matutinus</i> .....	335
<i>Lyncodaphnidæ</i> .....	492	mea ( <i>Lovénula</i> ) .....	533

	PAGE		PAGE
Medesicaste.....	560	Mursia.....	334
media (Euchæta).....	528	mutica (Megalopa).....	348
media (Oncea).....	555	mutica (Megalops).....	348
mediterranea (Antaria).....	555	Myodocopa.....	507
mediterranea (Oncea).....	555	Mysidacea.....	401
megacheles (Cheiriphotis).....	461	Mysidæ.....	403
megacheles (Meliita).....	461	Mysidea.....	401
Megalocypris.....	501		
Megalopa.....	348	Nahia.....	442
Megalopidea.....	348	namaquensis (Apus).....	485
Megalops.....	348	nana (Oithona).....	549
Megarthurus.....	545	nanus (Pentacheles).....	377
megistos (Cancer).....	350	nanus (Polycheles).....	377
megistos (Dardanus).....	351	Nasinatalis, n. g.....	340
megistos (Pagurus).....	350	nasotuberculata (Conchœcia).....	510
Meinertia.....	424	nasutus (Rhincalanus).....	523
Merhippolyte.....	391	nasutus (Rhinocalanus).....	523
messinensis (Euchirella).....	527	natalensis (Eurycarcinus).....	302
messinensis (Undina).....	527	natalensis (Galene).....	302
messor (Cancer).....	319	natalensis (Pachycheles).....	362
messor (Grapsus).....	319	natalensis (Pisosoma).....	362
messor (Metopograpsus).....	319	natalensis (Porcellana).....	362
Metaprotella.....	468	natalis (Attheyella).....	546
Metaproteo.....	470	natalis (Ceriodaphnia).....	490
Metopograpsus.....	319	natator (Cancer).....	307
Metoponorthus.....	440	natator (Charybdis).....	307
Metridia.....	534	Nautilocorystes.....	311
meus (Paradiaptomus).....	533	Nautilograpsus.....	320
Micippa.....	290	Nematoscelis.....	400
miersi (Leucothoe).....	453	Neobule.....	459
Miersiidae.....	394	Neolithodes.....	349
miles (Cancer).....	354	nepa (Squilla).....	405
miles (Diogenes).....	354	Nephropsidae.....	378
miles (Gaetanus).....	526	Nephropsis.....	379
miles (Pagurus).....	354	neptuni (Scolecithricella).....	530
mina (Philoscia).....	443	Neptunus.....	307
minor (Calanus).....	521	neptunus (Cystisoma).....	474
minor (Cetochilus).....	521	Nerocila.....	423
minor (Scolecithricella).....	530	Nesidea.....	504
minor (Scolecithrix).....	530	Nesideidae.....	503
minor (Undechæta).....	527	Niambia.....	440
minor (Undeuchæta).....	527	nicetensis (Phrosina).....	477
minutus (Cancer).....	320	nigricans (Armadillo).....	445
minutus (Planes).....	320	nigricans (Cubaris).....	445
Mitellidae.....	566	nigricans (Diploexochus).....	445
modesta (Niambia).....	442	nigrinus (Armadillo).....	446
Moina.....	492	nigrinus (Diploexochus).....	446
monachus (Eucalanus).....	522	nigromaculata (Sapphirina).....	553
moniziana (Calappa).....	334	nilotica (Caridina).....	394
monodon (Penæus).....	380	niloticus (Pelias).....	394
mucidus (Armadillo).....	446	nitidus (Diptychus).....	365
mucidus (Diploexochus).....	446	nitidus (Uroptychus).....	365
mucronata (Cytherura).....	506	nobilis (Cypridina).....	517
mucronatus (Ægisthus).....	544	Nocticula.....	396
mucronatus (Eucalanus).....	522	Noctiluca.....	396
mülleri (Euphausia).....	397	normani (Pseudorhombila).....	314
Munida.....	364	Notodelphyidea.....	549
Munidae.....	435	Notodelphyoida.....	549
muricata (Orthagoriscicola).....	559	Notophylla.....	484
muricatus (Cecrops).....	559	Notostomus.....	395
muricatus (Læmargus).....	559	Notostraca.....	484
muricatus (Orthagoriscicola).....	559	Nototropis.....	455



	PAGE		PAGE
novæhollandiæ (Metaproto) .....	470	<i>Oxystoma</i> .....	333
novæhollandiæ (Proto) .....	470	Oxystomata .....	333
novæzealandiæ (Caprellina) .....	470		
numidicus (Apus) .....	484	Pachos nom. nov. ....	556
Nyctiphanes .....	399	Pachycheles .....	361
		pachydaetyla ( <i>Candace</i> ) .....	539
<i>obliqua</i> ( <i>Estheria</i> ) .....	487	pachydaetyla ( <i>Candacia</i> ) .....	539
obliquus (Cyzicus) .....	487	Pachygrapsus .....	319
oblonga (Conchæcia) .....	508	<i>Pachysoma</i> .....	556
oblonga ( <i>Paraconchæcia</i> ) .....	508	pæderus ( <i>Cancer</i> ) .....	348
oblonga ( <i>Cylindroleberis</i> ) .....	517	pæderus ( <i>Marestia</i> ) .....	348
oblonga ( <i>Cypridina</i> ) .....	517	<i>Pagurias</i> .....	350
obtusata (Conchæcia) .....	510	Paguridæ .....	350
obtusus (Xantho) .....	297	Paguridea .....	349
<i>ocellata</i> ( <i>Dicera</i> ) .....	311	Paguristes .....	351
<i>ocellatus</i> ( <i>Nautilocorystes</i> ) .....	311	Pagurus .....	350
<i>octodentata</i> ( <i>Dicera</i> ) .....	311	Palæmon .....	384
octodentatus ( <i>Nautilocorystes</i> ) .....	311	Palæmonidæ .....	383
Oetolasmis .....	564	<i>Palemon</i> .....	384
Octomeris .....	574	<i>Palemonidea</i> .....	383
Ocypode .....	325	Palinuridæ .....	373
Ocypodidæ .....	325	Palinurus .....	373
ocyroe ( <i>Atergalis</i> ) .....	296	pallida (Niambia) .....	441
Oithona .....	548	palumbii ( <i>Augaptilus</i> ) .....	538
Onca .....	555	palumbi ( <i>Augaptilus</i> ) .....	538
Oncaidæ .....	555	Pandalidæ .....	391
Oncocypris .....	501	Pandalus .....	392
onconotus ( <i>Tryphosa</i> ) .....	450	Pandarus .....	558
Oniscidæ .....	439	Panulirus .....	374
Oniscidea .....	437	papillatus ( <i>Streptocephalus</i> ) .....	483
opalina ( <i>Sapphirina</i> ) .....	552	papilliger ( <i>Heterorhabdus</i> ) .....	537
Operculata .....	567	<i>papilligera</i> ( <i>Heterochata</i> ) .....	537
Oplophoridæ .....	394	Paracalanus .....	523
<i>Oplophorina</i> .....	394	Paradeutella .....	471
orbiculare ( <i>Hymenosoma</i> ) .....	331	Paradiaptomus .....	531
orbiculare ( <i>Leachium</i> ) .....	331	Paramoera .....	455
orbicularis ( <i>Armadillo</i> ) .....	446	Paramunna .....	435
orbicularis ( <i>Diploexochus</i> ) .....	446	Parapagurus .....	356
orbicularis ( <i>Polycope</i> ) .....	507	Parapalæmon .....	385
Orchestia .....	458	Parasphæroma .....	429
Orchestoidea .....	459	Parathemisto .....	476
<i>orientale</i> ( <i>Chænostoma</i> ) .....	329	<i>Paratyphes</i> .....	478
orientalis ( <i>Diaptomus</i> ) .....	531	Paratyphis .....	478
<i>Orio</i> .....	479	Paridotea .....	432
<i>ornata</i> ( <i>Thaliella</i> ) .....	566	parkeri ( <i>Jasus</i> ) .....	375
ornatum ( <i>Scalpellum</i> ) .....	566	Parthenope .....	292
orthagorisei ( <i>Pennella</i> ) .....	561	Parthenopidæ .....	292
Orthagoriscicola .....	559	parvidentata ( <i>Conchæcia</i> ) .....	512
<i>Ostrachoda</i> .....	495	parvula ( <i>Actæa</i> ) .....	299
Ostracoda .....	495	<i>parvulus</i> ( <i>Menippe</i> ) .....	299
<i>Ostracoteres</i> .....	330	parvus ( <i>Calanus</i> ) .....	523
Ostracotheres .....	330	parvus ( <i>Paracalanus</i> ) .....	523
Ostrapoda .....	495	paulsoni ( <i>Leontocaris</i> ) .....	391
Ovalipes .....	305	pavo ( <i>Calanus</i> ) .....	524
ovalis ( <i>Corycæus</i> ) .....	554	pavo ( <i>Calocalanus</i> ) .....	524
ovalis ( <i>Cyamus</i> ) .....	472	Pedunculata .....	563
ovata ( <i>Bairdia</i> ) .....	504	<i>pelagica</i> ( <i>Halocypris</i> ) .....	507
ovata ( <i>Nesidea</i> ) .....	504	pelagica ( <i>Lupa</i> ) .....	307
Oxycephalidæ .....	480	<i>pelagicus</i> ( <i>Cancer</i> ) .....	307
Oxycephalus .....	480	pelamydis ( <i>Caligus</i> ) .....	558
Oxyrrhyncha .....	283	<i>Pelias</i> .....	393
		pelucida ( <i>Euphausia</i> ) .....	397

	PAGE		PAGE
pellucida (Hemilamprops) .....	415	Pinnotheres.....	330
pellucidus (Corycæus) .....	554	Pinnotheridæ .....	330
Penæidæ .....	379	<i>Pinnotheridea</i> .....	330
Penæidea .....	379	<i>piscator</i> (Oxycephalus) .....	480
Penæus.....	380	<i>pisifer</i> (Halimede) .....	298
penantis (Caprella).....	465	<i>Pisina</i> .....	288
<i>Peneidæ</i> .....	380	Plagusia .....	322
<i>Peneidea</i> .....	379	Planes .....	320
penetrans (Medesicaste) .....	560	planissimum (Percnon).....	324
<i>Peneus</i> .....	380	planissimus (Cancer).....	324
penicillatus (Astacus) .....	374	planissimus (Leiolophus) .....	324
penicillatus (Panulirus) .....	374	<i>Platamon</i> .....	449
<i>pennantii</i> (Ebalia) .....	337	platyarthrodes (Dynomene) .....	347
Pennella .....	561	<i>Platycopa</i> .....	495
perangusta (Isocypris) .....	502	Platymaia .....	286
perarmata (Stenocypris) .....	500	Platyscelidæ .....	477
Percnon .....	324	Plesionika .....	392
perforata (Cycloidura ?) .....	431	Pleuromamma .....	535
perforata (Dynamenella ?).....	431	Pleuroxus .....	494
perforata (Sphæroma).....	431	<i>plicatus</i> (Grapsus) .....	319
<i>Pericera</i> .....	291	plumata (Pontella).....	541
<i>perlata</i> (Thelphusa) .....	293	plumata (Pontellina).....	541
<i>perlata</i> (Thelphusa) .....	293	plumifera (Oithona) .....	549
<i>perlatus</i> (Potamon) .....	294	pobequini (Potamonantes) .....	295
<i>perlatus</i> (Chlorodius).....	300	Podoceridæ .....	464
<i>perlatus</i> (Potamonantes) .....	293	Podocopa .....	495
peronii (Idotea) .....	433	Podoplea .....	543
peronii (Paridotea).....	433	Polycheles .....	377
persecans (Scolecithrix).....	529	Polycopa .....	507
Persephona .....	336	Polycopidæ .....	507
petersii (Palæmon).....	385	Pontella .....	541
petersii (Parapalæmon).....	385	Pontellidæ .....	540
<i>Petrochirus</i> .....	350	Pontellina .....	541
<i>Petrochirus</i> .....	351	Pontellopsis .....	541
Phænna .....	530	Pontharpinia .....	452
Philoscia .....	443	Pontocypris .....	503
Philyra.....	336	Pontogeneia .....	455
Photidæ .....	460	Pontogeneiidæ.....	455
Phoxocephalidæ .....	452	Pontophilus.....	383
Phronima .....	475	poppei (Chiridius) .....	526
Phronimidæ .....	475	Porcellana .....	361
Phronimidea .....	473	Porcellanidæ .....	360
Phrosina .....	477	Porcellio .....	440
Phrosinidæ .....	476	Porcellidiidæ .....	544
<i>Phrosinine</i> .....	476	Porcellidium .....	544
Phtisica .....	468	<i>porosa</i> (Lepas).....	570
Phylloniscus .....	438	<i>porosa</i> (Tetracita) .....	570
Phyllopoda .....	481	<i>porosus</i> (Asemus).....	571
Phyllopus.....	538	Potamon .....	293
Phyllosoma .....	375	Potamonantes.....	293
Phymodius .....	299	Potamonidæ .....	293
<i>picta</i> (Goniopsis).....	317	prehensilis (Sergestes).....	381
<i>picta</i> (Sesarma) .....	321	princeps (Megalocypris).....	502
<i>pictus</i> (Grapsus) .....	317	princeps (Metridia) .....	535
<i>pictus</i> (Pachysoma).....	321	priomena (Isocypris) .....	502
<i>pileatus</i> (Eucalanus) .....	522	procera (Conchæcia) .....	569
Pilodius .....	300	Processa .....	387
Pilumnoplax .....	313	Processidæ .....	387
Pilumnus.....	301	prominens (Parasphæroma).....	429
<i>Pinnoteres</i> .....	330	promontorii (Hyperia) .....	475
<i>Pinnoteridæ</i> .....	330	promontorii (Paratyphis) .....	478
<i>Pinnothera</i> .....	330	Pronoidæ .....	479

	PAGE		PAGE
<i>propinqua</i> (Leydigia).....	493	<i>reticulatum</i> (Sesarma) .....	321
<i>propinqua</i> (Daphnia).....	490	<i>retusa</i> (Cteatessa) .....	424
<i>propinqua</i> (Leydigia).....	493	<i>reynaudii</i> ( <i>Amphithoe</i> ) .....	459
<i>Proteocypris</i> .....	499	<i>reynaudii</i> (Neobule) .....	459
<i>Proto</i> .....	468	<i>Rhincalanus</i> .....	522
<i>pruinus</i> (Metoponorthus) .....	440	<i>Rhinocalanus</i> .....	522
<i>pruinus</i> ( <i>Porellio</i> ) .....	440	<i>rhynchena</i> (Conchœcia) .....	514
<i>prymna</i> ( <i>Cancer</i> ).....	309	<i>Rhynchothalestris</i> .....	545
<i>prymna</i> (Thalamita) .....	309	<i>richardi</i> (Cyphocaris).....	449
<i>Pseudeuphausia</i> .....	398	<i>rigaudi</i> (Ceriodaphnia) .....	490
<i>Pseudodiaptomus</i> .....	534	<i>rigida</i> (Oithona) .....	549
<i>Pseudodromia</i> .....	345	<i>rigidus</i> (Calamorrhynchus) .....	480
<i>pubescens</i> ( <i>Armadillo</i> ) .....	446	<i>ritteri</i> (Conchœcia) .....	514
<i>pubescens</i> (Diploexochus).....	446	<i>robusta</i> (Pleuromma) .....	536
<i>pulchella</i> (Jassa).....	462	<i>robustum</i> ( <i>Pleuromma</i> ) .....	536
<i>pulchella</i> ( <i>Xaiva</i> ) .....	305	<i>robustus</i> (Coryæus) .....	554
<i>pulchellus</i> (Portumnus).....	305	<i>Rocinela</i> .....	423
<i>pulcher</i> (Lysierichthus).....	406, 409	<i>rosea</i> ( <i>Conia</i> ) .....	571
<i>pulex</i> ( <i>Cancer</i> ).....	456	<i>rosea</i> (Tetracrita) .....	571
<i>pulex</i> (Gammarus ?) .....	456	<i>roseus</i> (Atergatis) .....	297
<i>punctata</i> (Anthura) .....	419	<i>roseus</i> ( <i>Carpilus</i> ) .....	297
<i>punctata</i> (Persephona) .....	336	<i>rostrata</i> (Galacantha) .....	364
<i>punctata</i> (Philyra).....	336	<i>rostrifrons</i> ( <i>Calanus</i> ) .....	523
<i>punctatus</i> ( <i>Cancer</i> ).....	336	<i>rostrifrons</i> (Rhincalanus) .....	523
<i>punctatus</i> (Streptocephalus) .....	318	<i>rotunda</i> ( <i>Dromia</i> ) .....	343
<i>punctillata</i> (Cypridopsis) .....	499	<i>rotunda</i> (Dromidia ?).....	343
<i>purcelli</i> (Diaptomus) .....	531	<i>rotunda</i> (Exodromidia ?) .....	343
<i>purcelli</i> (Streptocephalus) .....	483	<i>rotundata</i> (Conchœcia) .....	510
<i>purpurea</i> (Acanthephyra) .....	395	<i>rotundicaudata</i> ( <i>Callianassa</i> ) .....	369
<i>purus</i> (Læmatophilus) .....	464	<i>rotundicaudatus</i> (Calliactites).....	369
<i>pusilla</i> (Cyclocypris) .....	498	<i>rubescens</i> (Ectocyclops) .....	548
<i>pusilla</i> (Niambia) .....	442	<i>rubidgei</i> ( <i>Estheria</i> ).....	488
<i>pusillus</i> (Anapagurus) .....	358	<i>rubromaculatus</i> (Ceradocus).....	456
<i>pusillus</i> (Cyclops) .....	548	<i>rubromaculatus</i> (Gammarus) .....	456
<i>pusillus</i> (Diploexochus).....	447	<i>rudis</i> ( <i>Palemon</i> ).....	385
<i>Pylopagurus</i> .....	359	<i>rudis</i> (Eupalemon) .....	385
<i>Pyrocypris</i> .....	518	<i>rufescens</i> (Diploexochus) .....	447
<i>quadridentatus</i> ( <i>Acanthonyx</i> ) .....	288	<i>rugosa</i> ( <i>Cenobita</i> ) .....	360
<i>quadridentatus</i> (Dehaanius).....	288	<i>rugosa</i> (Cænobita) .....	360
<i>quadridentatus</i> ( <i>Mithrax</i> ) .....	292	<i>rugosus</i> (Cænobita) .....	360
<i>quadrimaculatus</i> (Diploexochus)...	446	<i>rugulosa</i> (Kraussia) .....	310
<i>queketti</i> (Mamaia) .....	290	<i>rugulosus</i> (Euxanthus) .....	297
<i>quinquedens</i> (Geryon) .....	313	<i>rugulosus</i> ( <i>Platyonichus</i> ) .....	310
<i>quinquedentatus</i> (Xantho) .....	298	<i>rüppellii</i> (Actæa) .....	299
<i>quoianus</i> (Palæmon) .....	384	<i>rüppellii</i> ( <i>Ægle</i> ) .....	299
<i>quoianus</i> ( <i>Palemon</i> ) .....	384	<i>rutilum</i> (Scapellum).....	567
<i>Rachinia</i> .....	289	<i>ryderi</i> (Oecypode) .....	327
<i>radiata</i> (Cypris) .....	496	<i>salpæ</i> (Sapphirina) .....	552
<i>radiatus</i> (Balanus).....	309, 569	<i>sancti-pauli</i> (Munida) .....	364
<i>rafineskii</i> (Livoneca) .....	425	<i>sanguinolenta</i> (Lupa) .....	307
<i>ramosa</i> (Xestoleberis) .....	506	<i>sanguinolentus</i> ( <i>Cancer</i> ).....	307
<i>Ranina</i> .....	339	<i>Sapphirina</i> .....	551
<i>Raninidæ</i> .....	339	<i>Sapphirinidæ</i> .....	551
<i>Raninoidea</i> .....	339	<i>sarsi</i> (Cypretta) .....	498
<i>rapax</i> (Conæa) .....	556	<i>sarsii</i> ( <i>Cyclaspis</i> ) .....	414
<i>raynaudii</i> (Livoneca).....	425	<i>sarsii</i> (Eocuma) .....	414
<i>recurva</i> (Euphausia) .....	398	<i>savignyi</i> (Calliadne) .....	371
<i>remipes</i> (Trischizostoma).....	448	<i>savignyi</i> (Sphæroma).....	432
<i>reniformis</i> (Proteocypris) .....	500	<i>scaber</i> (Porellio) .....	440
<i>reticulata</i> (Sesarma) .....	321	<i>scabra</i> ( <i>Hippa</i> ) .....	339
		<i>scabra</i> (Ranina) .....	339



	PAGE		PAGE
scabricula (Eriphia) .....	303	smithii (Charybdis) .....	306
scabriculum (Exosphæroma?) .....	429	smithii (Eriphia) .....	303
scabriculum ( <i>Sphæroma</i> ) .....	429	<i>smithii</i> ( <i>Nautilograpsus</i> ) .....	320
Scalpellum .....	566	solitaria (Caprella) .....	466
Scapholeberis .....	491	speciosus ( <i>Corycæus</i> ) .....	553
scarlata (Sapphirina) .....	553	spectabilis ( <i>Cyclaspis</i> ) .....	413
Schizophrys .....	292	Sphæroma .....	427
Schizopoda .....	395	Sphæromidæ .....	426
Scolecithricella .....	529	Sphæronella .....	562
Scolecithrix .....	529	Sphæronellidæ .....	562
Scottocheres .....	557	Sphæronotus .....	550
scourfieldi? ( <i>Cyclops</i> ) .....	547	Sphyrion .....	560
sculleyi ( <i>Apus</i> ) .....	485	spinifera ( <i>Conchæcia</i> ) .....	508
<i>sculpta</i> ( <i>Rhachocaris</i> ) .....	387	spinifera ( <i>Paraconchæcia</i> ) .....	508
sculptus ( <i>Pachycheles</i> ) .....	362	spinifera ( <i>Phænna</i> ) .....	530
sculptus ( <i>Polycheles</i> ) .....	377	spinifrons ( <i>Heterochæta</i> ) .....	537
scutellatus ( <i>Acanthonyx</i> ) .....	288	spinifrons ( <i>Heterorhabdus</i> ) .....	537
<i>scutellatus</i> ( <i>Calanus</i> ) .....	534	spinifrons ( <i>Homola</i> ) .....	347
scutellatus ( <i>Epiatus</i> ) .....	288	spinirostris ( <i>Conchæcia</i> ) .....	513
scutifrons ( <i>Conilorpheus</i> ) .....	422	spinosa ( <i>Dromia</i> ) .....	344
Scylla .....	308	spinosa ( <i>Dromidia</i> ) .....	344
Scyllaridæ .....	372	spinosa ( <i>Euchæta</i> ) .....	529
Scyllaridea .....	372	spinosa ( <i>Exodromidia</i> ) .....	344
Scyllarides .....	372	spinosum ( <i>Cystisoma</i> ) .....	474
Scyramathia .....	289	<i>spinus</i> ( <i>Oniscus</i> ) .....	474
sebana (Eriphia) .....	303	spinulosus ( <i>Acheopsis</i> ) .....	285
securifer (Pontella) .....	541	<i>splendens</i> ( <i>Euphausia</i> ) .....	397
securifrons ( <i>Scolecithrix</i> ) .....	529	<i>splendens</i> ( <i>Oithona</i> ) .....	549
<i>semilavis</i> ( <i>Plesionika</i> ) .....	392	<i>spongicola</i> ( <i>Balanus</i> ) .....	568
semilunata ( <i>Phrosina</i> ) .....	477	<i>spongicola</i> ( <i>Balanus</i> ) .....	568
septemdentatus ( <i>Atelecyclus</i> ) .....	310	spongiosa ( <i>Dromidia</i> ) .....	343
septemdentatus ( <i>Cancer Hippa</i> ) .....	310	spongites ( <i>Acasta</i> ) .....	570
septemspinosa ( <i>Arcania</i> ) .....	337	spongites ( <i>Lepas</i> ) .....	570
<i>septemspinus</i> ( <i>Cancer</i> ) .....	337	squalina ( <i>Leucisca</i> ) .....	338
Sergestes .....	380	squamata ( <i>Niambia</i> ) .....	441
Sergestidæ .....	380	<i>squamatus</i> ( <i>Leptotrichus</i> ) .....	441
serrata ( <i>Paradeutella</i> ) .....	471	squamosa ( <i>Plagusia</i> ) .....	323
serrata ( <i>Scylla</i> ) .....	308	squamosa ( <i>Tetracrita</i> ) .....	570
serrata ( <i>Tetracrita</i> ) .....	570	<i>squamosus</i> ( <i>Balanus</i> ) .....	570
<i>serratus</i> ( <i>Cancer</i> ) .....	308	<i>squamosus</i> ( <i>Cancer</i> ) .....	323
serricaudatus ( <i>Heterocalanus</i> ) .....	534	Squilla .....	405
serricaudatus ( <i>Pseudodiaptomus</i> ) .....	534	<i>Squilla</i> .....	468
serrulata ( <i>Conchæcia</i> ) .....	512	squilla ( <i>Cancer</i> ) .....	386
Sesarma .....	320	squilla ( <i>Leander</i> ) .....	386
Setella .....	543	squilla ( <i>Palæmon</i> ) .....	386
<i>setulosum</i> ( <i>Exosphæroma</i> ) .....	430	Squillidæ .....	405
sexdentata ( <i>Charybdis</i> ) .....	306	<i>stanleyana</i> ( <i>Herpetocypris</i> ) .....	501
<i>sexdentatus</i> ( <i>Cancer</i> ) .....	306	<i>stellata</i> ( <i>Gebia</i> ) .....	371
sexpes ( <i>Hexapus</i> Pl. 41) .....	315	Stenocionops .....	291
<i>scapus</i> ( <i>Hexapus</i> ) .....	316	Stenocypris .....	500
sidneyi ( <i>Potamonautes</i> ) .....	295	Stenothoe .....	453
<i>siliqua</i> ( <i>Leptestheria</i> ) .....	488	Stenothoidæ .....	453
<i>siliqua</i> ( <i>Leptestheria</i> ) .....	488	stimpsoni ( <i>Exosphæroma</i> ?) .....	428
<i>similis</i> ( <i>Daphnia</i> ) .....	489	stimpsoni ( <i>Pontharpinia</i> ) .....	452
similis ( <i>Euphausia</i> ) .....	398	stimpsoni ( <i>Sphæroma</i> ) .....	428
similis ( <i>Oithona</i> ) .....	549	<i>stimpsonii</i> ( <i>Exosphæroma</i> ?) .....	428
<i>Simoccephalus</i> .....	490	stolonifera ( <i>Cythere</i> ) .....	505
Simosa .....	490	<i>Stomatopoda</i> .....	404
simulans ( <i>Megarthurus</i> ) .....	545	<i>Stomatopoda</i> .....	404
sinuicauda ( <i>Sapphirina</i> ) .....	553	<i>streetsi</i> ( <i>Chirundina</i> ) .....	527
<i>smithi</i> ( <i>Gelasimus</i> ) .....	328	<i>streetsii</i> ( <i>Chirundina</i> ) .....	527
smithii ( <i>Antilibinia</i> ) .....	287	<i>Streptocephalus</i> .....	482

	PAGE		PAGE
<i>streptocheles</i> (Porcellana) .....	361	<i>Théostracæ</i> .....	575
striata (Archiconchœcia) .....	516	<i>Thelphusa</i> .....	293
striata (Tubicinella) .....	573	thomsoni (Daphnia) .....	489
<i>strigosa</i> (Goniopsis) .....	317	thomsoni (Dorynchus) .....	286
strigosus (Cancer) .....	317	thomsoni ( <i>Lispognathus</i> ) .....	286
strigosus (Grapsus) .....	317	Thoracica .....	563
striolata (Conchœcia) .....	513	thorelli (Sphæronotus) .....	550
<i>stylifer</i> (Calanus) .....	534	Thyrostraca .....	563
stylifera (Temora) .....	534	Thysanoessa .....	399
Stylocheiron .....	400	Thysanopoda .....	396
subarcuata (Conchœcia) .....	513	Thysanopodacea .....	395
subcarinata (Megamoera) .....	457	<i>Thysanopodea</i> .....	395
subcarinatus (Elasmopus) .....	457	Thysanopodidæ .....	396
subcrassus (Eucalanus) .....	522	tibicen (Calcinus) .....	353
<i>subinteger</i> (Grapsillus) .....	304	tibicen ( <i>Pagurus</i> ) .....	353
subreniformis (Pontocypris?) .....	503	tinninabulum (Balanus) .....	567
subrhomboidea (Loxconcha) .....	505	tinninabulum ( <i>Lepas</i> ) .....	567
subspinosa (Gebia) .....	370	Tiron .....	454
subspinosa (Upogebia) .....	370	Tironidæ .....	454
subtenuis (Eucalanus) .....	521	Tisbe .....	544
subtilis (Onca) .....	555	Tisbidæ .....	544
<i>subtriangularis</i> (Pontocypris?) .....	503	Titana .....	438
suhmii (Stylocheiron) .....	400	<i>tomentosa</i> (Plagusia) .....	323
sulcata (Cirolana) .....	421	tonsa (Euchæta) .....	529
<i>sulcatus</i> (Doto) .....	329	<i>trachealis</i> ( <i>Lepas</i> ) .....	573
sundaicus (Eupalæmon) .....	334	<i>trachealis</i> (Tubicinella) .....	573
sundaicus ( <i>Palæmon</i> ) .....	384	trachyasps (Apus) .....	485
symmetrica (Conchœcia) .....	514	Trapezia .....	303
Sympoda .....	409	triangularis ( <i>Erichthus</i> ) .....	408
syngamma (Cypris) .....	496	triangularis (Lysierichthus) .....	408
Synidotea .....	433	Trichodactylus .....	295
		trichota (Cypris) .....	497
Talitridæ .....	458	tridacnæ ( <i>Ostracoteres</i> ) .....	331
Talorchestia .....	459	tridacnæ (Ostracotheres) .....	331
<i>Tanaisidæ</i> .....	418	tridacnæ ( <i>Pinnotheres</i> ) .....	331
tanneri ( <i>Heterocheta</i> ) .....	538	trigona (Cypris) .....	496
tanneri ( <i>Heterorhabdus</i> ) .....	538	trigona ( <i>Hyperia</i> ) .....	476
<i>Telphusidæ</i> .....	293	trigona (Parathemisto) .....	476
Temora .....	534	trigonocephala ( <i>Ceratothoa</i> ) .....	425
tenella (Nematoscels) .....	400	trigonocephala ( <i>Cymothoa</i> ) .....	425
tenuicornis (Calanus) .....	520	<i>trimaculata</i> ( <i>Corystes</i> ) .....	306
tenuimana ( <i>Candace</i> ) .....	540	trimaculatus ( <i>Anisopus</i> ) .....	306
tenuimana (Candacia) .....	540	trimaculatus (Ovalipes) .....	306
tenuimana ( <i>Idya</i> ) .....	545	trioidous (Caprella), n. sp., Pl. 48B .....	467
tenuimana (Tisbe) .....	545	triquetra (Cypridopsis) .....	499
tenuimanus (Hemityphis) .....	478	Trischizostoma .....	448
terebrans (Chelura) .....	463	tristanensis (Eupagurus) .....	356
terebrans (Sphæroma) .....	427	tristense (Sphæroma) .....	427
testudinata ( <i>Lepas</i> ) .....	564	truncata (Anchialina) .....	403
Tetraclita .....	570	truncata ( <i>Candace</i> ) .....	539
tetragona (Sesarma) .....	321	truncata (Candacia) .....	539
tetragonum (Sesarma) .....	321	truncata (Niambia) .....	441
tetragonus ( <i>Cancer</i> ) .....	321	<i>truncatus</i> ( <i>Anchialus</i> ) .....	403
Tetralia .....	305	<i>truncatus</i> ( <i>Leptotrichus</i> ) .....	441
Tetrathyrus .....	478	<i>truncatus</i> ( <i>Porcellio</i> ) .....	441
tetrodontis (Cinusa) .....	425	Trypetesidæ, n.n. .....	575
Thalamita .....	309	Tryphosa .....	450
Thalassinidea .....	267	<i>tuberculata</i> (Calappa) .....	333
Thalestridæ .....	545	tuberculatus ( <i>Oxycephalus</i> ) .....	450
thalia ( <i>Cancer</i> ) .....	290	tuberculosa (Ebalia) .....	337
thalia (Micippa) .....	290	tuberculosa ( <i>Persephona</i> ) .....	337
thalia ( <i>Micippe</i> ) .....	290	tuberosa (Ebalia) .....	337



	PAGE		PAGE
tuberosa (Zonocypris) .....	502	venusticauda (Cirolana) .....	422
tuberosum (Pachos) .....	556	verdi (Ibaceus) .....	373
tuberosum (Pachysoma) .....	556	verdi (Ibacus) .....	373
tuberosus (Cancer) .....	337	verrucosipes (Pilumnus) .....	302
Tubicinella .....	573	vestita (Pilumnoplax) .....	314
turbynei (Platymaia) .....	286	vestitus (Curtomotus) .....	313
turgida (Pontella) .....	541	vestitus (Pilumnoplax) .....	313
turgida (Pontellina) .....	541	Vibilia .....	474
Tylidæ .....	439	Vibilidæ .....	474
tyloda (Conchæcia) .....	514	Vibiliidæ .....	474
Tylos .....	439	victor (Matuta) .....	335
Typhidæ .....	477	victor (Matutinus) .....	335
Typhlinæ .....	477	viduella (Cypridopsis) .....	498
typica (Aora) .....	460	vilis (Aphiloscia) .....	443
typicus (Anchialus) .....	403	vilis (Philoscia) .....	443
typicus (Centropages) .....	553	Virbius .....	390
typicus (Lophogaster) .....	401	virescens (Clibanarius) .....	352
Uca .....	327	virescens (Pagurus) .....	352
uncinata (Cymodoce) .....	430	virgata (Conchoderma) .....	566
Undeuchæta .....	526	virgata (Lepas) .....	566
ungulata (Idotea) .....	433	virgatum (Conchoderma) .....	566
ungulata (Paridotea) .....	433	voeltzkowi (Oncocypris) .....	501
ungulatus (Chlorodius) .....	299	vulgaris (Calanus) .....	520
ungulatus (Eupagurus) .....	359	vulgaris (Clibanarius) .....	352
ungulatus (Oniscus) .....	433	vulgaris (Undina) .....	520
ungulatus (Phymodius) .....	299	wahlbergii (Limnetis) .....	486
ungulatus (Pylopagurus) .....	359	wahlbergii (Lynceus) .....	486
Upogebia .....	370	webbii (Æga) .....	422
Uroptychidæ .....	365	webbii (Pterelas) .....	422
Uroptychus .....	365	westergreni (Notostomus) .....	395
valida (Cymodoce) .....	430	wolfendeni (Porcellidium) .....	544
validum (Exospheroma) .....	430	wyville-thomsoni (Platymaia) .....	286
Valvifera .....	432	Xaiva .....	305
vanhöffeni (Cypridina) .....	517	Xanthidæ .....	296
vanhöffeni (Rhynchothalestris) ..	545	Xantho .....	297
varicans (Candace) .....	540	Xanthocalanus .....	530
varicans (Candacia) .....	540	xanthoides (Pilumnus) .....	301
variegata (Lysianassa) .....	449	Xestoleberis .....	505
variegatus (Anonyx) .....	449	xiphias (Pleuromamma) .....	536
variegatus (Lysianax) .....	449	xiphias (Pleuromma) .....	536
Varuna .....	319	zancleus (Orio) .....	479
ventricosa (Proto) .....	468	Zanclopus .....	550
ventricosa (Squilla) .....	468	zimmeri (Iphinoë), n. sp., Pl. 44	411
venusta (Euchirella) .....	527	Zonocypris .....	502
venusta (Metridia) .....	535	Zuzara .....	431
venusta (Onca) .....	555		

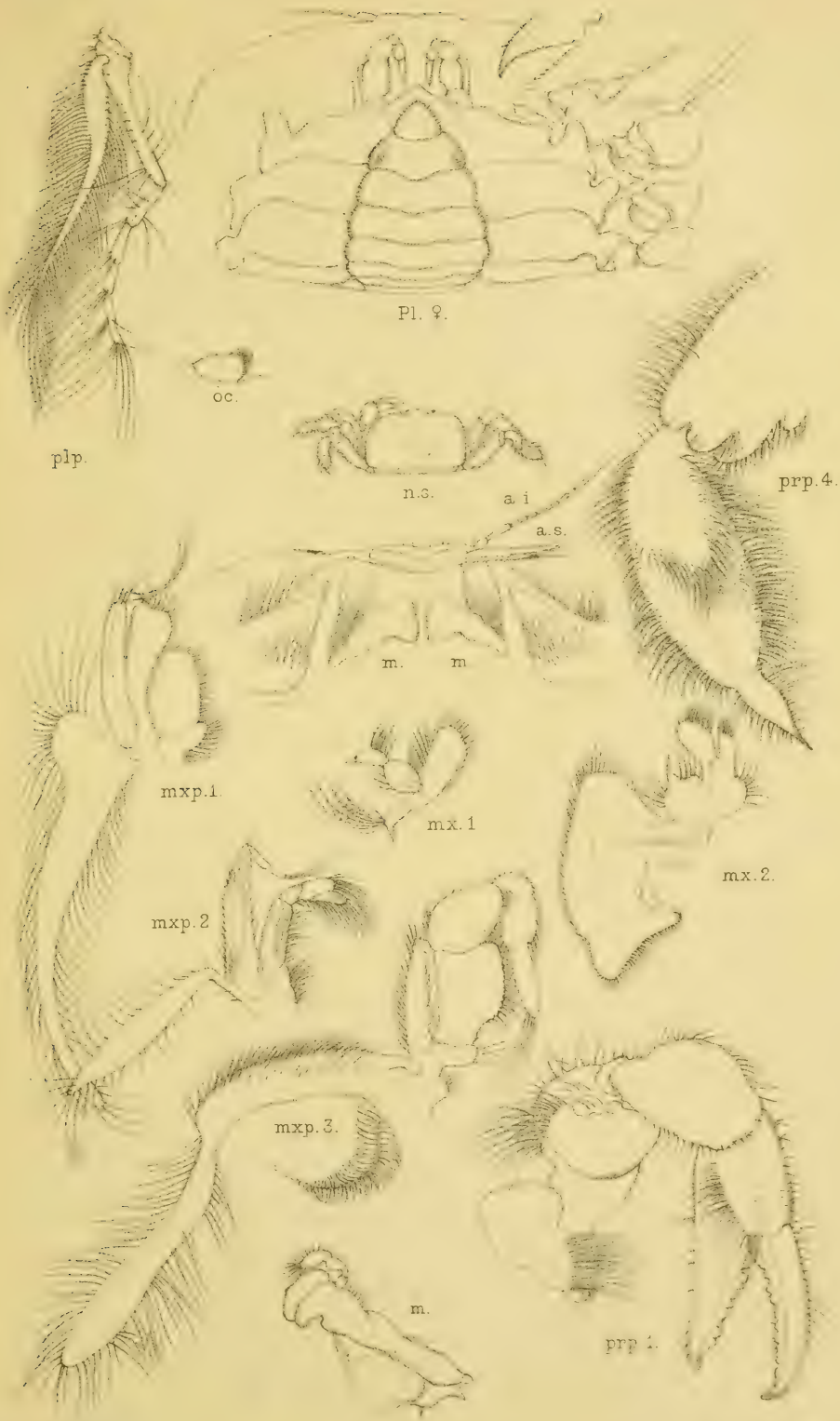


EXPLANATION OF PLATES.

PLATE XV. (Crustacea, PLATE XLI.)

*Hexapus sexpes* (Fabricius).

- n.s. Natural size of female specimen, from which the enlarged details are drawn.  
The figure is in dorsal view, the right cheliped wanting.
- Pl. ♀. Dorsal view of pleon clasped against the sternum, with ventral view of the third maxilliped and parts of limbs of the left side.
- oc. The right eye, raised a little out of its orbit.
- a.s., a.i., m., m. Part of underside of head, showing first and second antennæ of the left side, tips of the eyes, and the mandibles.
- m. Right mandible, seen from the inner dorsal side, with its palp brought into view. In the preceding figure this mandible is on the left, in ventral view.
- mx. 1, mx. 2. First and second maxillæ.
- mxp. 1, 2, 3. First, second, and third maxillipeds.
- prp. 1, prp. 4. The left cheliped or first peræopod, and terminal part of the fourth, in this species the last, peræopod.
- plp. Pleopod from the second segment of the female pleon.



Del. T.R.R. Stebbing.

West, Newman lith.

HEXAPUS SEXPES (*Fabricius*)







PLATE XVI. (Crustacea, PLATE XLII.)

*Nasinatalis disjunctipes*, n.g. et sp.

n.s., n.s. Lines indicating the natural size of the adjoining figures, the upper representing a specimen in dorsal view, the lower a smaller specimen in ventral view. To the right of the latter is a more enlarged portion of the front in dorsal view, showing the position of the first antennæ, a.s., a.s., in relation to the eyes.

Pl. s., 5-7. The fifth, sixth, and seventh segments of the pleon of the uppermost figure in dorsal view.

m. Mandible.

mxp. 2. Second maxilliped.

mxp. 3, D., mxp. 3, L., mxp. 3, V. The dorsal or inner, the lateral, and the ventral or outer aspects of the third maxillipeds.

br., br. Two of the branchiæ, each showing two biseriate plumes connected only at the base.

prp. 1, prp. 2, prp. 5. The first peræopod or cheliped, the second, and the fifth peræopods.

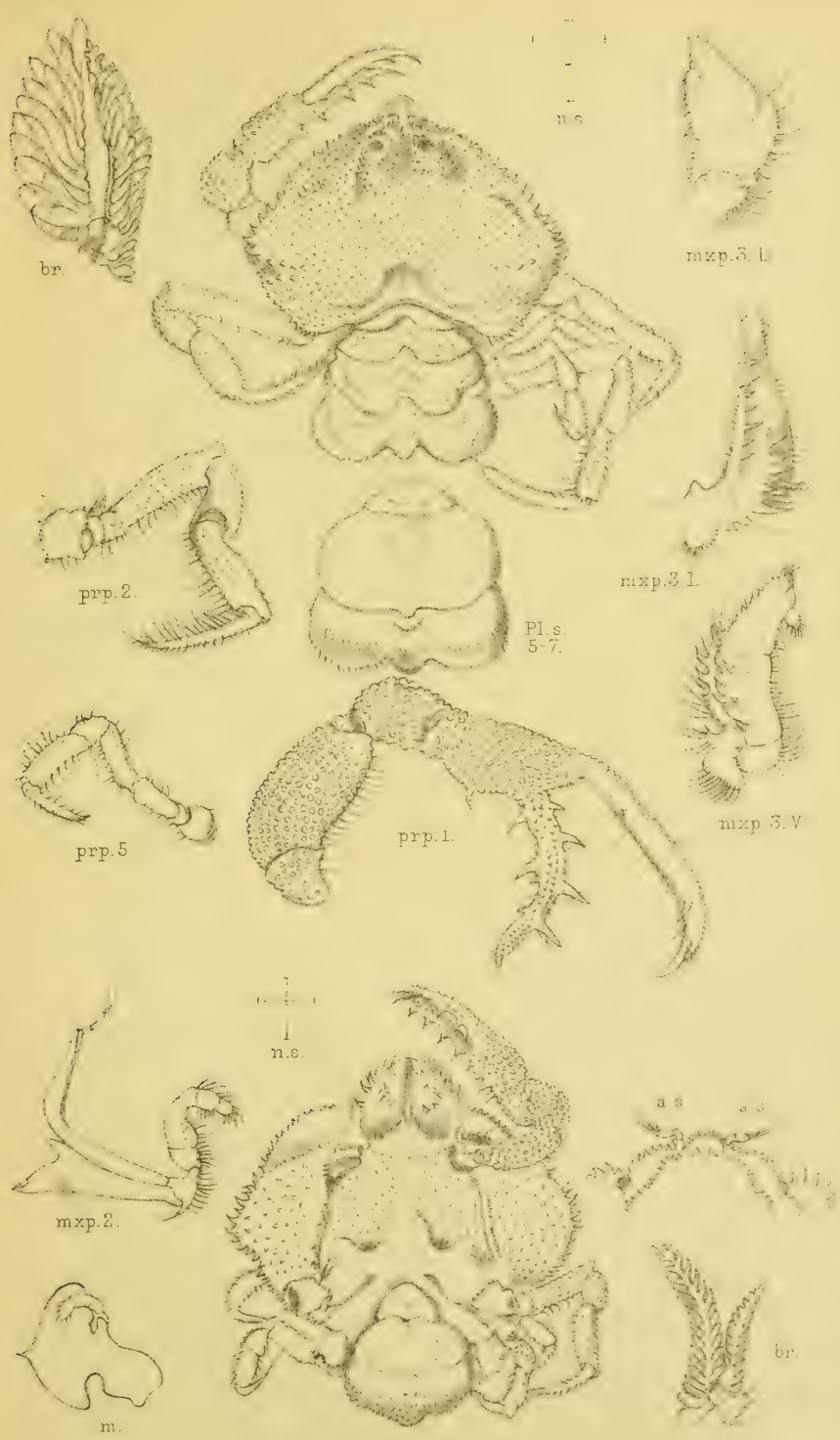








PLATE XVII. (Crustacea, PLATE XLIII.)

*Parapagurus bouvieri*, n. sp.

- ♂. The figure below gives an enlarged dorsal view of the cephalothorax, showing in position the eyes, first antennæ, acicles of the second, the chelipeds, second peræopods, and on the left the third peræopod. Protruding on the right are the extraneous bladder-like organisms.
- a.s., mxp. 3, prp. 1, prp. 2. These letters are attached to a lateral view of the cephalothorax, showing in position an eye, a first antenna, a maxilliped, the larger right-hand cheliped (first peræopod), and the second peræopod. The extraneous organisms are seen at the bases of the third maxilliped and the second peræopod. In these composite figures the exact relative sizes are not preserved, owing to the difficulty of focussing under the microscope.
- T. The telson and the uropods in connection with the sixth pleon segment.
- oc. One of the eyes, much magnified.
- a.s., a.i. The first antenna and the peduncle of the second, magnified to the same scale as the separated eye, but not so highly as the following details.
- prp. 4, prp. 5. The three terminal joints of the fourth, and two terminal of the fifth peræopod.
- plp. 1., plp. 1, plp. 2. The convex and concave sides of the first pair of sexually modified male pleopods, in position between the coxæ of the fifth peræopods; and one of the second pair.
- urp., urp. The uropods magnified to the same scale as prps. 4, 5, plps. 1, 2, and the higher enlargement of the telson.



Del. T. R. R. Stebbing

West, Newman lith.

PARAPAGURUS BOUVIERI, n.sp.







PLATE XVIII. (Crustacea, PLATE XLIV.)

*Iphinoë zimmeri*, n. sp.

n.s. Line indicating natural size of specimen figured below in dorsal and lateral aspects.

a.s., a.i. The first antenna and proximal part of the second, highly magnified.

Car., a.i., a.i. Part of the carapace, showing on the left the second antenna in position when in quiescence, on the right the first antenna in position, and the second withdrawn from its groove.

br. Branchial leaves from the branchial apparatus of the first maxilliped.

m.xp. 2, m.xp. 3. The second pair of maxillipeds and one of the third maxillipeds, each with the distal part more enlarged.

prp. 1, 2, 3, 4, 5. The five peræopods, with distal portions of the second and third more enlarged.

plp. One of the pleopods, with lateral armature of the peduncle much more magnified.

T., urp. Telsonic segment and uropods, with branches of the uropods more enlarged.

The details are all given, in the first instance, to a uniform scale, but the further enlargements are on a higher scale for the antennæ and pleopod than those of the other details.

m.xp. 1, juv. First maxilliped of a specimen apparently juvenile.

T. juv., urp. Telsonic segment and uropods of the young specimen, less highly magnified than the maxilliped.







PLATE XIX. (Crustacea, PLATE XLV.)

*Iphinoë crassipes*, Hansen.

n.s. Line indicating natural size of adult male, represented in lateral view in the adjoining figure.

Car. Front part of carapace in dorsal view, with one of the first antennæ.

a.s., a.i. First and second antennæ.

mx. i., mxp. 1, 2, 3. First maxilla, and first, second, and third maxillipeds. Parts of first maxilla and of a first maxilliped more highly magnified.

prp. 1, 2, 3, 5. First, second, third and fifth peræopods.

T., urp. Telsonic segment, with left uropod in attachment.

The details are magnified to a uniform scale, with exception of the parts of mx. 1, and mxp. 1, above mentioned.









PLATE XX. A. (Crustacea, PLATE XLVI. A.)

*Puramunna lævifrons*, n. sp.

n. s. Line indicating natural size of species figured below in dorsal view.

oe., a.s., a.i. Ocular lobe, first antenna, second antenna.

m., mxp. Mandible, maxilliped.

gn. 1, gn. 2. First and second gnathopods.

plp. 1, plp. 2. First and second pleopods.

T., urp. Telsonic segment and uropod.

The details magnified to a uniform scale.

PLATE XX. B. (Crustacea, PLATE XLVI. B.)

*Dic calmani*, n.g. et sp.

n.s. Line indicating natural size of specimen figured below in dorsal and lateral aspects.

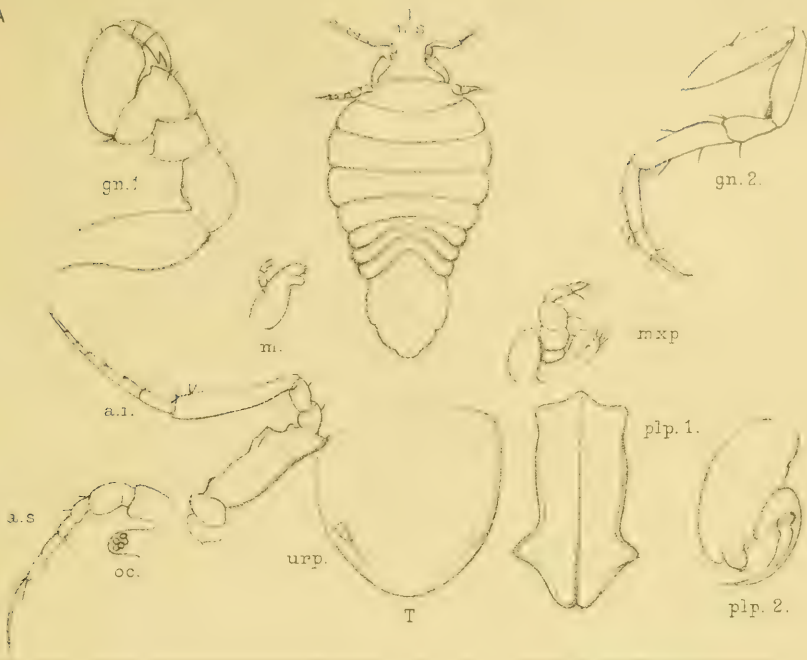
Car. Carapace flattened out.

a.s., a.i. The pair of first antennæ, with higher magnification of the flagella, and a second antenna.

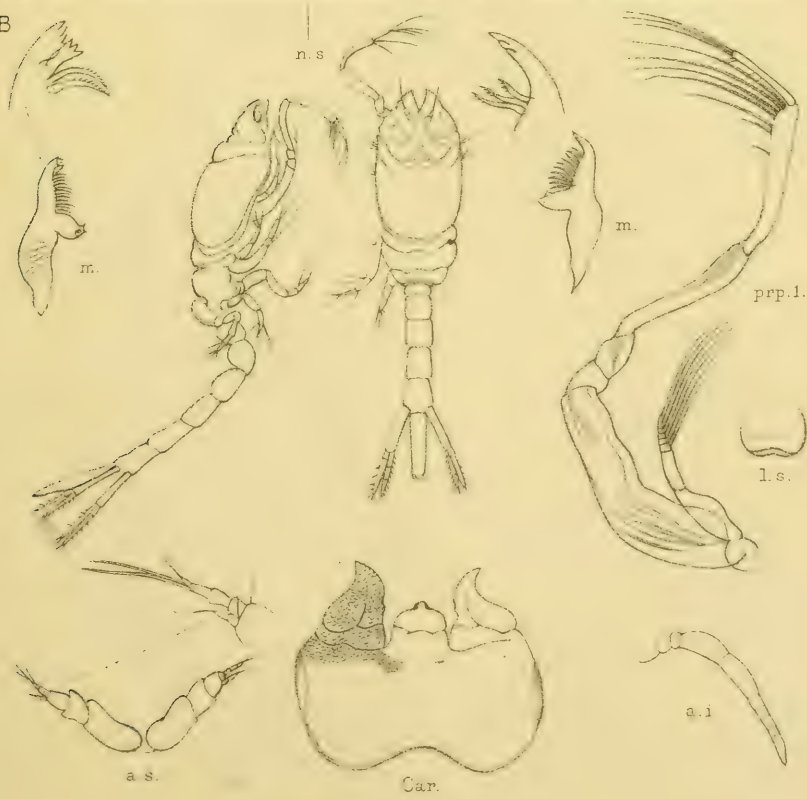
l.s., m., m. Upper lip and mandibles, cutting edges and some spines more enlarged.

prp. 1. First peræopod.

A



B



Del. T. R. Stebbing. West, Newman lith.

A. PARAMUNNA LAEVIFRONS, *n. sp.* B. DIC CALMANI, *n. g. et sp.*







PLATE XXI. (Crustacea, PLATE XLVII.)

*Dic calmani*, n.g. et sp.

l.i. Lower lip, with further enlargement of one apex.

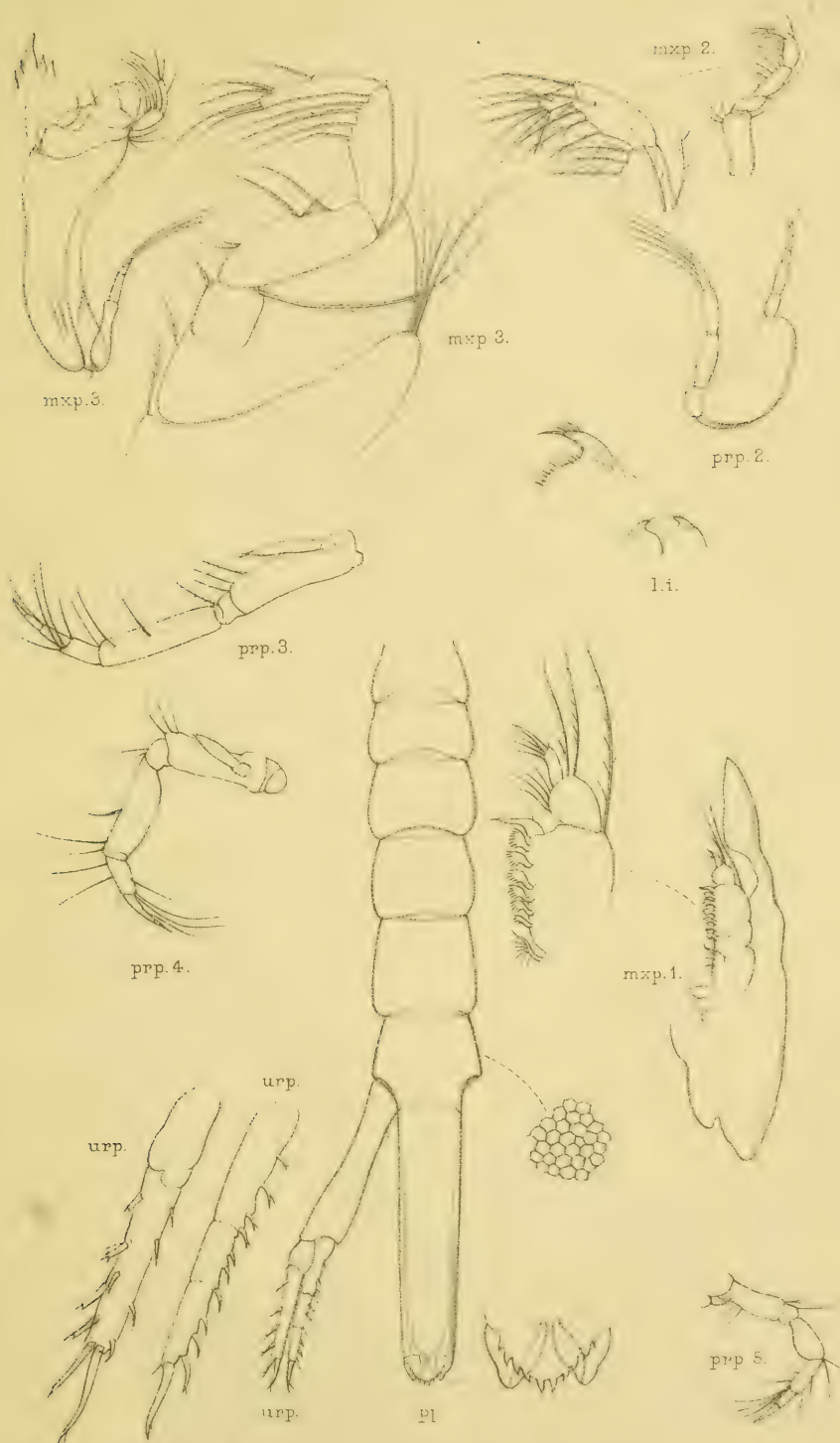
mxp. 1, mxp. 2, mxp. 3, mxp. 3. First, second, and third maxillipeds, each with partial further enlargement. In the complete figure of the third maxilliped, the fifth joint is seen by transparence; in the more highly magnified part of the companion third maxilliped, the fifth joint is uppermost.

prp. 2, 3, 4, 5. The second, third, fourth, and fifth peræopods.

urp. The uropod, with higher magnification of its exopod and endopod.

Pl. The pleon, with higher magnification of apex and anal valves, and surface markings of the sixth segment.

All the details in this and the preceding Plate B are enlarged to a uniform scale, with higher enlargement, also uniform, of some parts, including distal portion of mxp. 3, and the two branches of the left uropod.















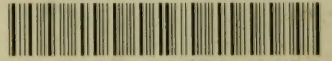








SMITHSONIAN INSTITUTION LIBRARIES



3 9088 00580 8886